

10/758, 182

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* * * * * Welcome to STN International * * * * *

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NEWS 2 "Ask CAS" for self-help around the clock
NEWS 3 FEB 25 CA/CAPLUS - Russian Agency for Patents and Trademarks
(ROSPATENT) added to list of core patent offices covered
NEWS 4 FEB 28 PATDPAFULL - New display fields provide for legal status
data from INPADOCC
NEWS 5 FEB 28 BABS - Current-awareness alerts (SDIs) available
NEWS 6 FEB 28 MEDLINE/LMEDLINE reloaded
NEWS 7 MAR 02 GBFULL: New full-text patent database on STN
NEWS 8 MAR 03 REGISTRY/ZREGISTRY - Sequence annotations enhanced
NEWS 9 MAR 03 MEDLINE file segment of TOXCENTER reloaded
NEWS 10 MAR 22 KOREAPAT now updated monthly; patent information enhanced
NEWS 11 MAR 22 Original IDE display format returns to REGISTRY/ZREGISTRY
NEWS 12 MAR 22 PATDPASPC - New patent database available
NEWS 13 MAR 22 REGISTRY/ZREGISTRY enhanced with experimental property tags
NEWS 14 APR 04 EPFULL enhanced with additional patent information and new
fields
NEWS 15 APR 04 EMBASE - Database reloaded and enhanced
NEWS 16 APR 18 New CAS Information Use Policies available online
NEWS 17 APR 25 Patent searching, including current-awareness alerts (SDIs),
based on application date in CA/CAPLUS and USPATFULL/USPAT2
may be affected by a change in filing date for U.S.
applications.
NEWS 18 APR 28 Improved searching of U.S. Patent Classifications for
U.S. patent records in CA/CAPLUS

NEWS EXPRESS JANUARY 10 CURRENT WINDOWS VERSION IS V7.01a, CURRENT
MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
AND CURRENT DISCOVER FILE IS DATED 10 JANUARY 2005

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FILE 'HOME' ENTERED AT 19:27:04 ON 28 APR 2005

=> fil reg

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.21

0.21

FILE 'REGISTRY' ENTERED AT 19:27:11 ON 28 APR 2005

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STRUCTURE FILE UPDATES: 27 APR 2005 HIGHEST RN 849400-77-7

DICTIONARY FILE UPDATES: 27 APR 2005 HIGHEST RN 849400-77-7

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TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

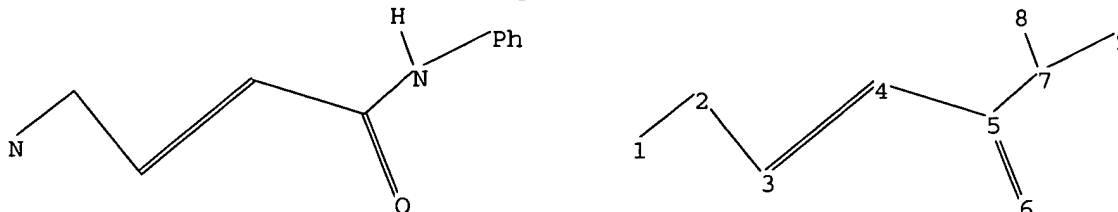
*
* The CA roles and document type information have been removed from *
* the IDE default display format and the ED field has been added, *
* effective March 20, 2005. A new display format, IDERL, is now *
* available and contains the CA role and document type information. *
*

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:
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=>

Uploading C:\Program Files\Stnexp\Queries\10758187.str



chain nodes :

1 2 3 4 5 6 7 8 9

chain bonds :

1-2 2-3 3-4 4-5 5-6 5-7 7-8 7-9

exact/norm bonds :

1-2 5-6 5-7

exact bonds :

2-3 3-4 4-5 7-8 7-9

Match level :

1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS 7:CLASS 8:CLASS 9:CLASS

L1 STRUCTURE UPLOADED

=> d query

L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> s l1

SAMPLE SEARCH INITIATED 19:27:25 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 4 TO ITERATE

100.0% PROCESSED 4 ITERATIONS 2 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 4 TO 200
PROJECTED ANSWERS: 2 TO 124

L2 2 SEA SSS SAM L1

=> s l1 full

FULL SEARCH INITIATED 19:27:29 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 122 TO ITERATE

100.0% PROCESSED 122 ITERATIONS 46 ANSWERS
SEARCH TIME: 00.00.01

L3 46 SEA SSS FUL L1

=> fil caplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	161.33	161.54

FILE 'CAPLUS' ENTERED AT 19:27:32 ON 28 APR 2005
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FILE COVERS 1907 - 28 Apr 2005 VOL 142 ISS 18
FILE LAST UPDATED: 27 Apr 2005 (20050427/ED)

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This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s l3

L4 22 L3

=> d l4 1-22 abs ibib hitstr

L4 ANSWER 1 OF 22 CAPLUS COPYRIGHT 2005 ACS on STN
 AB The present invention is directed to a method for applying to a substrate, in the form of a seal, a polysiloxane-containing coating, preferably a polysiloxane(amide-ureide) coating capable of inhibiting corrosion as well as accumulation of ice. One embodiment of the present invention is directed to a polysiloxane(amide-ureide) that forms a durable, long lasting, anticorrosive and deicing coating when applied to a substrate as a seal. The ability of the sealant material to adhere to surfaces and inhibit formation of ice upon penetration of moisture through the sealed substrate surface interfaces makes it particularly useful in construction of aircraft and other vehicles. Thus, α,ω -diaminopolydimethylsiloxane (MW 26,000) reacted with fumaryl chloride at a mole ratio of 2:1 forming a first product, and α,ω -diaminopolydimethylsiloxane (MW 2,300) reacted with 2,4-TDI at a mole ratio of 2:1 forming a second product. The amine-terminated products (1 mol of each) reacted with 2 mol of fumaryl chloride to result in a polysiloxane(amide-ureide) having block structure.

ACCESSION NUMBER: 2004:701648 CAPLUS
 DOCUMENT NUMBER: 141:227041
 TITLE: Corrosion-resistant moisture-resistant sealants and deicing materials
 INVENTOR(S): Byrd, Norman R.; Keener, Steven G.
 PATENT ASSIGNER(S): The Boeing Company, USA
 SOURCE: U.S. Pat. Appl. Publ., 29 pp., Cont.-in-part of U.S. Ser. No. 455,070.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 4
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004166333	A1	20040826	US 2003-741359	20031219
US 2003232941	A1	20031218	US 2002-164826	20020607
US 2003235696	A1	20031225	US 2003-436015	20030512
US 6797795	B2	20040928		
US 2003232201	A1	20031218	US 2003-455070	20030605
US 6809169	B2	20041026		

PRIORITY APPLN. INFO.:
 US 2002-164826 B2 20020607
 US 2003-436015 A2 20030512
 US 2003-455070 A2 20030605

IT 745062-84-4P
 RL: IMF (Industrial manufacture); RCT (Reactant); TEM (Technical or engineered material use); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
 (corrosion-resistant moisture-resistant sealants and deicing materials)

RN 745062-84-4 CAPLUS
 CN Poly[oxy(dimethylsilylene)], α -[[4-(aminobutyl)dimethylsilyl]- ω -[[4-(aminobutyl)dimethylsilyl]oxy], polymer with ω -[[3-[[[(2E)-4-chloro-1,4-dioxo-2-butenyl]amino]propyl]dimethylsilyl]- ω -[[3-[[[(2E)-4-chloro-1,4-dioxo-2-butenyl]amino]propyl]dimethylsilyl]oxy]poly[oxy(dimethylsilylene)] and 1,3-diisocyanatomethylbenzene, block (9CI) (CA INDEX NAME)

CH 1
 CRN 745062-83-3
 CMF (C2 H6 O Si)n C18 H30 C12 N2 O5 Si2
 CCI PMS

L4 ANSWER 2 OF 22 CAPLUS COPYRIGHT 2005 ACS on STN
 GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The invention provides a compds. of formula I [wherein: S1 and S2 are independently selected from H, alk(en/yn)yl, arylalkyl, (un)substituted aryl, or S1 and S2 together with the nitrogen to which they are attached form a N-containing heteroaryl] as intermediates in preparation of derivs.

of [(dimethylaminocrotonyl)amido]quinoline, useful as protein kinase inhibitors. For instance, [(dimethylaminocrotonyl)amido]quinoline derivative

II was prepared via amination of the obtained aminocrotonic acid chloride I-HCl (S1 = S2 = H) by aminoquinoline derivative III and subsequent recrystn. (example 1, no yield data).

ACCESSION NUMBER: 2004:648322 CAPLUS
 DOCUMENT NUMBER: 141:173872
 TITLE: A large-scale synthesis of 4-amino-2-butenoyl chlorides, useful as intermediates in preparation of [(dimethylaminocrotonyl)amido]quinoline derivatives
 INVENTOR(S): Considine, John Leo; Daigneault, Sylvain; Chew, Warren; Iera, Silvio; Duncan, Scott Mason; Ren, Jianxin
 PATENT ASSIGNEE(S): Wyeth, John, and Brother Ltd., USA
 SOURCE: PCT Int. Appl., 39 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004066919	A2	20040812	WO 2004-US1133	20040116
WO 2004066919	A3	20050127		

W: AE, AE, AG, AL, AL, AM, AM, AM, AT, AT, AU, AU, AZ, AZ, BA, BA, BG, BG, BR, BR, BW, BY, BY, BZ, BZ, CA, CH, CN, CN, CO, CO, CR, CR, CU, CU, CZ, CZ, DE, DE, DK, DK, DM, DM, EC, EC, EG, EG, ES, ES, FI, FI, GB, GB, GE, GE, GH, GH, HR, HR, HU, HU, ID, ID, IN, IS, JP, JP, KE, KE, KG, KG, KP, KP, KR, KR, KZ, KZ, KZ, LC, LK, LR, LS, LS, LT, LU, LV, MA, MD, MD, MG, MK, MN, MW, MX, MX, MZ, MZ, NA, NI

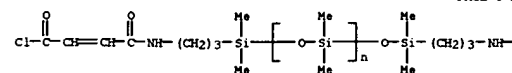
US 2004162442 A1 20040819 US 2004-758187 20040115
 PRIORITY APPLN. INFO.: US 2003-441470P P 20030121
 OTHER SOURCE(S): MARPAT 141:173872
 IT 501332-27-0P

RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (target intermediate; large-scale synthesis of (dimethylamino)butenoyl chloride, useful as intermediate in preparation of [(dimethylaminocrotonyl)amido]quinoline derivs.)

RN 501332-27-0 CAPLUS
 CN 2-Butenoyl chloride, 4-(dimethylamino)-, hydrochloride (9CI) (CA INDEX NAME)

L4 ANSWER 1 OF 22 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

PAGE 1-A

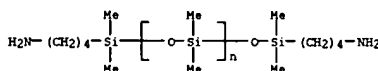


PAGE 1-B



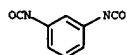
CH 2

CRN 201230-18-4
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 CCI PMS



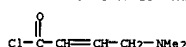
CH 3

CRN 26471-62-5
 CMF C9 H6 N2 O2
 CCI IDS



D1=Me

L4 ANSWER 2 OF 22 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

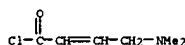


● HCl

L4 ANSWER 3 OF 22 CAPLUS COPYRIGHT 2005 ACS ON STN
 AB The invention provides the use of a combination of CCI-779 and EKB-569 (preparation described) in the treatment of neoplasms.
 ACCESSION NUMBER: 2003:202467 CAPLUS
 DOCUMENT NUMBER: 138:231711
 TITLE: Antineoplastic combinations of CCI-779 and EKB-569
 INVENTOR(S): Rabinathan, Sridhar Krishnas Gibbons, James J., Jr.
 PATENT ASSIGNEE(S): Wyeth, John, and Brother Ltd., USA
 SOURCE: PCT Int. Appl., 31 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003020266	A1	20030313	WO 2002-US24841	20020806
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, BG, CZ, MD, RU, TJ, TM, RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2003050222	A1	20030313	US 2002-212889	20020806
US 6617333	B2	20030909		
EP 1414438	A1	20040506	EP 2002-768432	20020806
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
BR 2002011769	A	20040727	BR 2002-11769	20020806
JP 200505549	T2	20050224	JP 2003-524573	20020806
PRIORITY APPLN. INFO.:			US 2001-310646P	P 20010807
			WO 2002-US24841	W 20020806

IT 501332-27-0P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (CCI-779 and EKB-569 antineoplastic combination)
 RN 501332-27-0 CAPLUS
 CN 2-Butenoyl chloride, 4-(dimethylamino)-, hydrochloride (9CI) (CA INDEX NAME)



● HCl

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

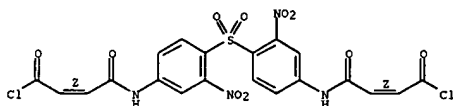
L4 ANSWER 4 OF 22 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)

RN 432527-19-0 CAPLUS
 CN 2-Butenoyl chloride, 4,4'-[sulfonylbis(3-nitro-4,1-phenylene)imino]]bis[4-oxo-, (2Z,2'Z)-, polymer with 4,4'-[sulfonylbis(3-nitro-4,1-phenylene)azo]]bis[phenol] (9CI) (CA INDEX NAME)

CH 1

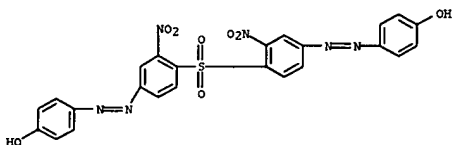
CRN 432527-18-9
 CMF C20 H12 C12 N4 O10 S

Double bond geometry as shown.



CH 2

CRN 409325-21-9
 CMF C24 H16 N6 O8 S



IT 432527-17-8P 432527-21-4P 432527-22-5P
 432527-23-6P
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
 (preparation and characterization of optically active)
 RN 432527-17-8 CAPLUS
 CN D-Glucitol, 1,4:3,6-dianhydro-, polymer with 4,4'-[methylenebis(3-nitro-4,1-phenylene)azo]]bis[phenol] and (2Z,2'Z)-[4,4'-methylenebis(3-nitro-4,1-phenylene)imino]]bis[4-oxo-2-butenoyl chloride] (9CI) (CA INDEX NAME)

CH 1

CRN 432527-14-5
 CMF C21 H14 C12 N4 O8

Double bond geometry as shown.

L4 ANSWER 4 OF 22 CAPLUS COPYRIGHT 2005 ACS ON STN
 AB The synthesis and characterization of a new series of chiral poly(ester-amides) are reported. They were prepared by the simple reaction of diacid chlorides with biphenolic azo chromophores and optically active dihydroxy compound (isosorbide) in dimethylacetamide at 100°C. The polymers containing isosorbide units were optically active. The polymers showed Tg between 100 and 190°C and were stable up to 400°C. These poly(ester-amides) showed a pos. solvatochromism in UV-visible absorption spectra. Second harmonic generation activities were measured by the powder method.

ACCESSION NUMBER: 2002:209337 CAPLUS
 DOCUMENT NUMBER: 137:6500
 TITLE: Optically active poly(ester-amide)s: synthesis and characterization
 AUTHOR(S): Philip, Bijus; Sreekumar, K.
 CORPORATE SOURCE: Department of Chemistry, University of Kerala, Trivandrum, 695 581, India
 SOURCE: Polymer International (2001), 50(12), 1318-1323
 CODEN: PLYIEI; ISSN: 0959-8103
 PUBLISHER: John Wiley & Sons Ltd.
 DOCUMENT TYPE: Journal
 LANGUAGE: English

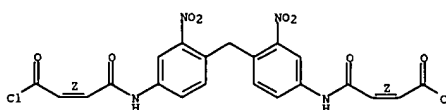
IT 432527-15-6P 432527-19-0P
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
 (preparation and characterization of)
 RN 432527-15-6 CAPLUS

CN 2-Butenoyl chloride, 4,4'-[methylenebis(3-nitro-4,1-phenylene)imino]]bis[4-oxo-, (2Z,2'Z)-, polymer with 4,4'-[methylenebis(3-nitro-4,1-phenylene)azo]]bis[phenol] (9CI) (CA INDEX NAME)

CH 1

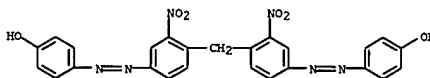
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 CMF C21 H14 C12 N4 O8

Double bond geometry as shown.

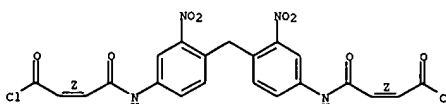


CH 2

CRN 244067-05-8
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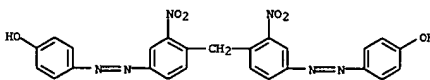


L4 ANSWER 4 OF 22 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)



CH 2

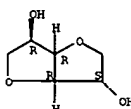
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 CMF C25 H18 N6 O6



CH 3

CRN 652-67-5
 CMF C6 H10 O4

Absolute stereochemistry. Rotation (+).

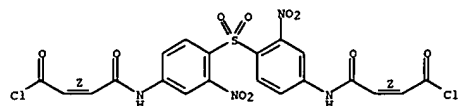


RN 432527-21-4 CAPLUS
 CN D-Glucitol, 1,4:3,6-dianhydro-, polymer with 4,4'-[sulfonylbis(3-nitro-4,1-phenylene)azo]]bis[phenol] and (2Z,2'Z)-[4,4'-methylenebis(3-nitro-4,1-phenylene)imino]]bis[4-oxo-2-butenoyl chloride] (9CI) (CA INDEX NAME)

CH 1

CRN 432527-18-9
 CMF C20 H12 C12 N4 O10 S

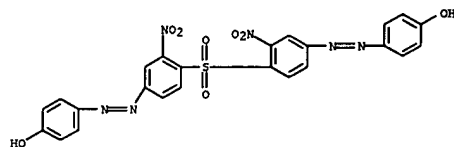
Double bond geometry as shown.



CM 2

CRN 409325-21-9

CMF C24 H16 N6 O8 S

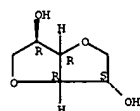


CM 3

CRN 652-67-5

CMF C6 H10 O4

Absolute stereochemistry. Rotation (+).



RN 432527-22-5 CAPLUS

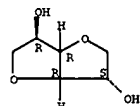
CH D-Glucitol, 1,4:3,6-dianhydro-, polymer with (2Z,2'Z)-4,4'-[methylenebis[(3-nitro-4,1-phenylene)imino]]bis[4-oxo-2-butenoyl chloride] (9CI) (CA INDEX NAME)

CM 1

CRN 432527-14-5

CMF C21 H14 C12 N4 O8

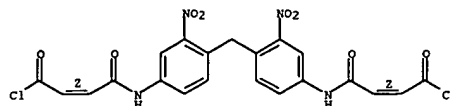
Double bond geometry as shown.



REFERENCE COUNT:

17

THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

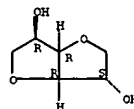


CM 2

CRN 652-67-5

CMF C6 H10 O4

Absolute stereochemistry. Rotation (+).



RN 432527-23-6 CAPLUS

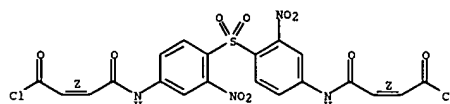
CH D-Glucitol, 1,4:3,6-dianhydro-, polymer with (2Z,2'Z)-4,4'-[sulfonatebis[(3-nitro-4,1-phenylene)imino]]bis[4-oxo-2-butenoyl chloride] (9CI) (CA INDEX NAME)

CM 1

CRN 432527-18-9

CMF C20 H12 C12 N4 O10 S

Double bond geometry as shown.



CM 2

CRN 652-67-5

CMF C6 H10 O4

Absolute stereochemistry. Rotation (+).

AB A series of chiral poly(ester-amide)s and polyesters were synthesized for nonlinear optical (NLO) studies. They were prepared by solution polycondensation of biphenolic azo chromophores, optically active dihydroxy compds. and diacid chlorides. Their thermal behavior was studied using TGA and DSC. The polymers were stable up to 400°. They showed Tg between 100° and 200°. The thermal stability and glass transition temperature of the polymers were high enough for NLO application.

ACCESSION NUMBER: 2002:85576 CAPLUS

DOCUMENT NUMBER: 136:310253

TITLE: Thermal properties of some chiral polymers designed for NLO studies

AUTHOR(S): Philip, Biju; Sreekumar, K.
CORPORATE SOURCE: Department of Chemistry, University of Kerala, Trivandrum, 695581, India

SOURCE: Journal of Polymer Materials (2001), 18(4), 365-369

CODEN: JOPM88; ISSN: 0970-0938

PUBLISHER: Oxford & IBH Publishing Co. Pvt. Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

IT 409325-13-9P 409325-15-1P 409325-17-3P

409325-19-5P 409325-22-0P 409325-24-2P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)

(thermal properties of some chiral polymers designed for NLO studies)

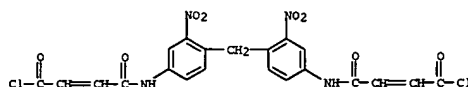
RN 409325-13-9 CAPLUS

CH D-Glucitol, 1,4:3,6-dianhydro-, polymer with 4,4'-[methylenebis[(3-nitro-4,1-phenylene)imino]]bis[4-oxo-2-butenoyl chloride] (9CI) (CA INDEX NAME)

CM 1

CRN 409325-12-8

CMF C21 H14 C12 N4 O8

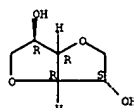


CM 2

CRN 652-67-5

CMF C6 H10 O4

Absolute stereochemistry. Rotation (+).

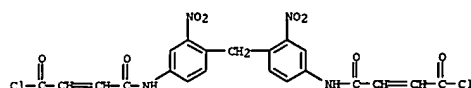


L4 ANSWER 5 OF 22 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

RN 409325-15-1 CAPLUS
CN 2-Butenoyl chloride, 4,4'-[methylenebis[(3-nitro-4,1-phenylene)imino]]bis[4-oxo-, polymer with 4,4'-[methylenebis[(3-nitro-4,1-phenylene)azo]]bis[phenol] (9CI) (CA INDEX NAME)

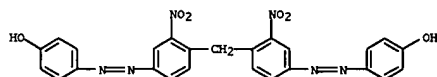
CM 1

CRN 409325-12-8
CMF C21 H14 C12 N4 O8



CM 2

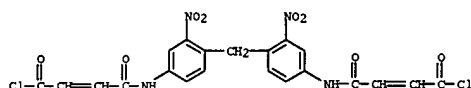
CRN 244067-05-8
CMF C25 H18 N6 O6



RN 409325-17-3 CAPLUS
CN D-Glucitol, 1,4:3,6-dianhydro-, polymer with 4,4'-[methylenebis[(3-nitro-4,1-phenylene)azo]]bis[phenol] and 4,4'-[methylenebis[(3-nitro-4,1-phenylene)imino]]bis[4-oxo-2-butenoyl chloride] (9CI) (CA INDEX NAME)

CM 1

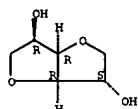
CRN 409325-12-8
CMF C21 H14 C12 N4 O8



CM 2

CRN 244067-05-8
CMF C25 H18 N6 O6

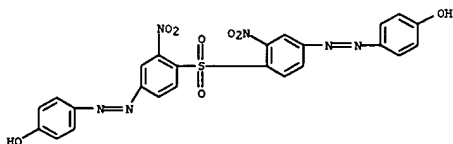
L4 ANSWER 5 OF 22 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 409325-22-0 CAPLUS
CN 2-Butenoyl chloride, 4,4'-[sulfonylbis[(3-nitro-4,1-phenylene)imino]]bis[4-oxo-, polymer with 4,4'-[sulfonylbis[(3-nitro-4,1-phenylene)azo]]bis[phenol] (9CI) (CA INDEX NAME)

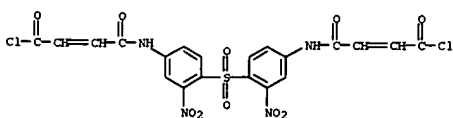
CM 1

CRN 409325-21-9
CMF C24 H16 N6 O8 S



CM 2

CRN 409325-18-4
CMF C20 H12 C12 N4 O10 S

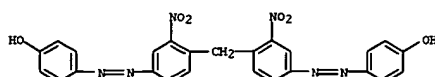


RN 409325-24-2 CAPLUS
CN D-Glucitol, 1,4:3,6-dianhydro-, polymer with 4,4'-[sulfonylbis[(3-nitro-4,1-phenylene)azo]]bis[phenol] and 4,4'-[sulfonylbis[(3-nitro-4,1-phenylene)imino]]bis[4-oxo-2-butenoyl chloride] (9CI) (CA INDEX NAME)

CM 1

CRN 409325-21-9

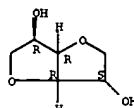
L4 ANSWER 5 OF 22 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



CM 3

CRN 652-67-5
CMF C6 H10 O4

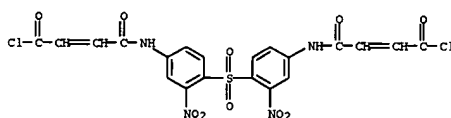
Absolute stereochemistry. Rotation (+).



RN 409325-19-5 CAPLUS
CN D-Glucitol, 1,4:3,6-dianhydro-, polymer with 4,4'-[sulfonylbis[(3-nitro-4,1-phenylene)imino]]bis[4-oxo-2-butenoyl chloride] (9CI) (CA INDEX NAME)

CM 1

CRN 409325-18-4
CMF C20 H12 C12 N4 O10 S

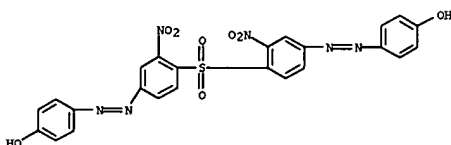


CM 2

CRN 652-67-5
CMF C6 H10 O4

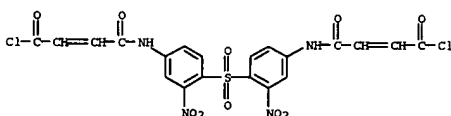
Absolute stereochemistry. Rotation (+).

L4 ANSWER 5 OF 22 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



CM 2

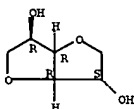
CRN 409325-18-4
CMF C20 H12 C12 N4 O10 S



CM 3

CRN 652-67-5
CMF C6 H10 O4

Absolute stereochemistry. Rotation (+).



REFERENCE COUNT:

11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 6 OF 22 CAPLUS COPYRIGHT 2005 ACS on STN
 AB Several substituted β -amino alcs. were synthesized in a diastereoselective manner via the novel highly versatile intermediate PhCH₂OZCHCH(OH)CORMeO₂, involving a combination of N-acyliminium ion and Weinreb amide chemical

ACCESSION NUMBER: 2001:894372 CAPLUS
 DOCUMENT NUMBER: 136:279086
 TITLE: Highly diastereoselective synthesis of β -amino alcohols
 AUTHOR(S): Meester, Wim J. N.; van Dijk, Rudmer; van Maarseveen, Jan H.; Rutjes, Floris P. J. T.; Hermkens, Pedro H. H.; Hienstra, Henk
 CORPORATE SOURCE: Institute of Molecular Chemistry, University of Amsterdam, Amsterdam, 1018 WS, Neth.
 SOURCE: Journal of the Chemical Society, Perkin Transactions 1 (2001), (22), 2909-2911
 CODEN: JCSPEC; ISSN: 1472-7781
 PUBLISHER: Royal Society of Chemistry
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 136:279086
 IT 406673-11-8P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (stereoselective preparation of β -amino alcs. via N-methoxy-N-methyl-2-benzylloxycarbonylamino-2-methoxyacetamide)
 RN 406673-11-8 CAPLUS
 CN 2-Butenoyl chloride, 4-(methoxymethylamino)-4-oxo- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

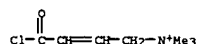
L4 ANSWER 7 OF 22 CAPLUS COPYRIGHT 2005 ACS on STN
 AB Compns. and methods are provided for enhanced transdermal electrotransport of 17-hydroxy sterol compds., including testosterone. The parent sterols are modified at the 17-hydroxy position by covalent attachment of a charged chemical modifier. The chemical modifier provides the parent sterol with enhanced transport properties and is hydrolyzed under physiolo conditions to release the active parent compound The composition comprises

a 17-hydroxy sterol/chemical modifier complex, more generally represented by the formula (sterol-O-)C(O)-R-N(R1)(R2)(R3)+. The portion of the complex derived from the chemical modifier is indicated by C(O)-R-N(R1)(R2)(R3)+, where N(R1)(R2)(R3)+ represents a quaternary ammonium group and R1, R2, and R3 are independently selected from the group consisting of lower alkyl, alkyl, aryl, arylalkyl, cycloalkyl, heteroalkyl, and heteroarylalkyl; or R1 and R2 together with the nitrogen to which they are attached form a substituted heterocycle and R3 is lower alkyl, and R is a linking moiety, linking the (sterol-O)-C(O)- to the nitrogen atom.

ACCESSION NUMBER: 1997:287176 CAPLUS
 DOCUMENT NUMBER: 126:347281
 TITLE: Testosterone prodrugs for improved drug delivery
 INVENTOR(S): Hale, Ron L.; Lu, Amy T.; Solas, Dennis W.; Cormier, Michel J. N.
 PATENT ASSIGNEE(S): Affymax Technologies N.V., UK; Alza Corporation
 SOURCE: U.S., 30 pp., Cont.-in-part of U.S. Ser. No. 898,219, abandoned.
 CODEN: USXXAM
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 5
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5622944	A	19970422	US 1995-434892	19950504
US 5607691	A	19970304	US 1995-449188	19950524
PRIORITY APPLN. INFO.:			US 1992-898219	B2 19920612
			US 1993-9463	B2 19930127
			US 1993-77296	B2 19930614
			US 1993-164293	B1 19931209

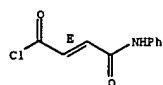
OTHER SOURCE(S): MARPAT 126:347281
 IT 189830-46-4P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and reaction with testosterone)
 RN 189830-46-4 CAPLUS
 CN 2-Buten-1-aminium, 4-chloro-N,N,N-trimethyl-4-oxo-, chloride (9CI) (CA INDEX NAME)



● Cl-

L4 ANSWER 8 OF 22 CAPLUS COPYRIGHT 2005 ACS on STN
 AB Ureido, oxamoyl, fumaranoyl and terephthalamoyl derivs. of ampicillin or amoxicillin were synthesized by reaction of (acyl)penicillin with (dihydroxy)arylamines or (diacyloxy)arylamines. Corresponding compds. derived from 3,4-diacetoxylaniline showed significant increase of activity against pseudomonas and salmonella in contrast to derivs. without catechol substituents. No increase of activity was observed by corresponding derivs. of bi- and tricyclic amines. Derivs. with oxamoyl, fumaranoyl or terephthalamoyl groups were found to be more active than the corresponding ureido derivs. Studies with mutants possessing higher membrane permeability have shown that the high activities of catechol containing derivs. are connected with the improved penetration through the outer membrane. Some new penicillin derivs. are more stable against β -lactamases compared with azlocillin.

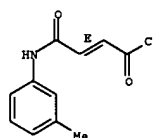
ACCESSION NUMBER: 1995:51752 CAPLUS
 DOCUMENT NUMBER: 122:55762
 TITLE: Synthesis and antibacterial activity of new ureido and dicarboxylic acid diamido derivatives of acylpenicillins with and without catechol substituents
 AUTHOR(S): Heinisch, L.; Moellmann, U.; Tresselt, D.; Willitzer, H.
 CORPORATE SOURCE: Hans-Knoell-Institute Naturstoff-Forschung, Jena, Germany
 SOURCE: Arzneimittel-Forschung (1994), 44(3), 349-54
 CODEN: ARZNAD; ISSN: 0004-4172
 DOCUMENT TYPE: Journal
 LANGUAGE: German
 IT 159788-26-8
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (preparation of (acyl)penicillin derivs. bactericides)
 RN 159788-26-8 CAPLUS
 CN 2-Butenoyl chloride, 4-oxo-4-(phenylamino)-, (E)- (9CI) (CA INDEX NAME)



IT 159788-40-6P 159788-41-7P 159788-42-8P
 159788-43-9P 159788-44-0P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation of (acyl)penicillin derivs. bactericides)
 RN 159788-40-6 CAPLUS
 CN 2-Butenoyl chloride, 4-[(3-methylphenyl)amino]-4-oxo-, (E)- (9CI) (CA INDEX NAME)

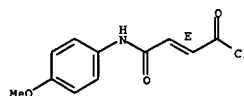
Double bond geometry as shown.

L4 ANSWER 8 OF 22 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



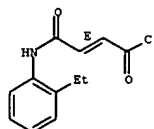
RN 159788-41-7 CAPLUS
 CN 2-Butenoyl chloride, 4-[(4-methoxyphenyl)amino]-4-oxo-, (E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



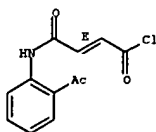
RN 159788-42-8 CAPLUS
 CN 2-Butenoyl chloride, 4-[(2-ethylphenyl)amino]-4-oxo-, (E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



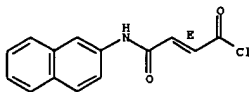
RN 159788-43-9 CAPLUS
 CN 2-Butenoyl chloride, 4-[(2-acetylphenyl)amino]-4-oxo-, (E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RN 159788-44-0 CAPLUS
 CN 2-Butenyl chloride, 4-(2-naphthalenylamino)-4-oxo-, (E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



GI For diagram(s), see printed CA Issue.

AB RQCH2NR1CH2CR2R3CR4R5CR6:CR7CR8R9R10 [1; R = 5- or 6-membered heterocyclyl; Q = Q1, Q2; R1 = H, (halo)alkyl, alkenyl, alkynyl, cycloalkyl; R2-R7 = H, halo, alkyl; R2R4, R3R5, R6R7 = bond; R8, R9 = F, CF3, alkyl; R8R9C = cycloalkyl; R10 = R9, H, AcO, alkoxy; X1-X10 = O, S, CO, (alkyl)methylene, imino, adjacent groups = olefinic linkage; A1, A2 = CH, N, O, S; B1, B2 = atoms of complete 5- or 6-membered aromatic rings;

R11,

R12 = H, halo, OH, cyano, alkyl, alkoxy, were prepared Thus, a mixture of E-3-[3-(3-thienyl)-2-propenylloxymethyl]benzyl bromide and E-N-ethyl-6,6-dimethyl-2-hepten-4-ynylamine hydrochloride were stirred overnight with K2CO3 in DMF to give 72.5% title compound II. I inhibited human Squalene epoxidase with IC50 = 0.2-0.8 nM. Capsules were prepared containing I.

ACCESSION NUMBER: 1992:20925 CAPLUS
 DOCUMENT NUMBER: 116:20925
 TITLE: Preparation of heterocyclylaminoalkenes as squalene epoxidase inhibitors
 INVENTOR(S): Tsuchiya, Yoshimi; Nomoto, Takashi; Hayashi, Masahiro; Iwasawa, Yoshikazu; Masaki, Hitoshi; Ohkubo, Mitsuru; Sakuma, Yumiko; Nagata, Yasufumi; Satoh, Toshihiko; Kamai, Toshio
 PATENT ASSIGNEE(S): Banyu Pharmaceutical Co., Ltd., Japan
 SOURCE: Eur. Pat. Appl., 86 pp.
 CODEN: EPKXDW
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 448078	A2	19910925	EP 1991-104341	19910320
EP 448078	A3	19920708		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
CA 2038633	AA	19910921	CA 1991-2038633	19910319
AU 9173524	A1	19910926	AU 1991-73524	19910319
AU 634871	B2	19930304		
JP 06172310	A2	19940621	JP 1991-81635	19910319
US 5306729	A	19940426	US 1993-26120	19930304
US 5439932	A	19950808	US 1993-26692	19930304
PRIORITY APPLN. INFO.:			JP 1990-71542	A 19900320
			JP 1990-88624	A 19900403
			JP 1991-81635	19910319
			JP 1990-284391	A 19901024
			JP 1990-284392	A 19901024
			JP 1991-42988	A 19910215
			US 1991-672430	B1 19910320

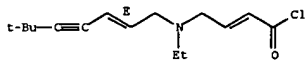
OTHER SOURCE(S): HARPAT 116:20925

IT 138165-68-1P

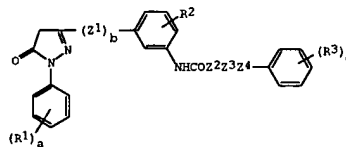
RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation and condensation of, with thienylbenzylamine, in preparation of
 squalene epoxidase inhibitor)

RN 138165-68-1 CAPLUS
 CN 2-Butenyl chloride, 4-[(6,6-dimethyl-2-hepten-4-ynyl)ethylamino]-, (7,E)- (9CI) (CA INDEX NAME)

Double bond geometry as described by E or Z.



GI



AB A Ag halide color photog. material contains, in a green-sensitive emulsion layer, a magenta coupler having the general formula I (R1 = halogen; R2 = H or halogen; R3 = C1-8 alkyl; Z1 = NH or NHCO; Z2 = Z5CONH or (Z6)NHCO; Z3 = C1-8 alkylene; Z4 = O, S, or SO2; Z5 = C1-8 alkylene or phenylene; Z6 = C1-4 alkylene or phenylene; a = 0, 1, 2 or 3; b, d = 1, 2, or 3; c = 0, 1 or 2). The magenta coupler-containing photog. material produces no fog during

storage and has high color-forming efficiency, excellent color reproduction, high sensitivity, and good weather resistance. The magenta images provided by the coupler have excellent color tone and fastness.

ACCESSION NUMBER: 1991:132997 CAPLUS
 DOCUMENT NUMBER: 114:132997
 TITLE: Silver halide color photographic material
 INVENTOR(S): Kim, Kwang Tae; Kim, Young Soo; Kim, Jin Youl
 PATENT ASSIGNEE(S): Cheil Synthetic Textiles Co., Ltd., S. Korea
 SOURCE: U.S., 22 pp.
 CODEN: USXXAM
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4933465	A	19900612	US 1988-292536	19881230
PRIORITY APPLN. INFO.:			US 1988-292536	19881230
OTHER SOURCE(S):			CASREACT 114:132997; HARPAT 114:132997	
IT 129929-29-9P				

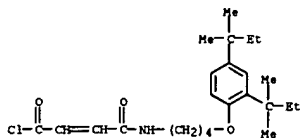
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and reaction of, in preparing phenylpyrazolone derivs.

magenta

photog. coupler)

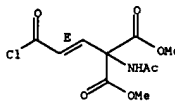
RN 129929-29-9 CAPLUS

CN 2-Butenyl chloride, 4-[[4-[2,4-bis(1,1-dimethylpropyl)phenoxy]butyl]amino]-4-oxo- (9CI) (CA INDEX NAME)



L4 ANSWER 11 OF 22 CAPLUS COPYRIGHT 2005 ACS ON STN
 AB A multistep synthesis of trans-3,4-didehydro-L-ornithine and trans-3,4-didehydro-L-arginine is described.
 ACCESSION NUMBER: 1989:574614 CAPLUS
 DOCUMENT NUMBER: 111:174614
 TITLE: Unsaturated amino acids: synthesis of trans-3,4-didehydro analogs of L-ornithine and L-arginine
 AUTHOR(S): Tolman, V.; Sedmera, P.
 CORPORATE SOURCE: Inst. Nucl. Biol. Radiochem., Czech. Acad. Sci., Prague, 142 20, Czech.
 SOURCE: Tetrahedron Letters (1988), 29(47), 6183-4
 CODEN: TELEAY; ISSN: 0040-4039
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 111:174614
 IT 120082-73-7P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and hydride reduction of)
 RN 120082-73-7 CAPLUS
 CN Propanedioic acid, (acetylamino) (3-chloro-3-oxo-1-propenyl)-, dimethyl ester, (E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

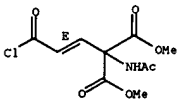


L4 ANSWER 12 OF 22 CAPLUS COPYRIGHT 2005 ACS ON STN
 AB Optically pure 3H-labeled ornithine was prepared by direct tritiation of L-2,5-diamino-trans-3-pentenoic acid with Pd/BaSO₄ catalyst. The specific radioactivity was 1.51 TBq/nmol and radiochem. purity 96%. The acid was prepared by an 8-step synthesis starting with Michael addition of di-Me acetamidomalonate to tert-Bu propiolate. The resulting tert-Bu ester was hydrolyzed by trifluoroacetic acid and the free carboxyl group was converted to the acyl chloride. Subsequent reduction with Li tri-tert-butoxy

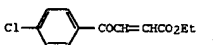
aluminate yielded Me 2-acetamido-5-hydroxy-2-methoxycarbonyl-trans-3-pentenoate which was further converted to the chloro compound with SOCl₂. Reaction with K phthalimide yielded Me 2-acetamido-5-phthalimido-2-methoxycarbonyl-trans-3-pentenoate. Hydrolysis yielded the free 2-acetamido-5-amino-trans-3-pentenoic acid which was deacetylated by enzyme acylase I to the unsatd. analog of L-ornithine with an 8% final yield.

ACCESSION NUMBER: 1989:173726 CAPLUS
 DOCUMENT NUMBER: 110:173726
 TITLE: Synthesis of L-[3,4-T] ornithine
 AUTHOR(S): Tolman, V.
 CORPORATE SOURCE: Ustav Nukl. Biol. Radiochem., CSAV, Prague, Czech.
 SOURCE: Radioisotopy (1988), 29(1-2), 183-5
 CODEN: RAISBC; ISSN: 0322-8657
 DOCUMENT TYPE: Journal
 LANGUAGE: Czech
 IT 120082-73-7P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and reduction of)
 RN 120082-73-7 CAPLUS
 CN Propanedioic acid, (acetylamino) (3-chloro-3-oxo-1-propenyl)-, dimethyl ester, (E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



L4 ANSWER 13 OF 22 CAPLUS COPYRIGHT 2005 ACS ON STN
 GI



AB RCOCH:CHCOR1 (R = aryl or heteroaryl; R1 = Cl-10 alkoxy, anilino, Cl-6-alkylamino, N-heterocyclyl) were prepared and shown to be effective sebum reducers for rats. Thus, PhCl and AlCl₃ were treated with E-EtO₂CCH:CHCOCl to give the Et oxobutenoate ester I.

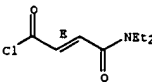
ACCESSION NUMBER: 1984:174458 CAPLUS
 DOCUMENT NUMBER: 100:174458
 TITLE: Aryloxobutenoic acid derivatives and their use in sebum-suppressing compositions
 INVENTOR(S): Moeller, Hinrich; Wallat, Siegfried
 PATENT ASSIGNEE(S): Henkel K.-G.a.A., Fed. Rep. Ger.
 SOURCE: Ger. Offen., 14 pp.
 CODEN: GWXEX
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

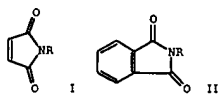
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3228842	A1	19840202	DE 1982-3228842	19820802
US 4562068	A	19851231	US 1983-458963	19830118
EP 101918	A1	19840307	EP 1983-107271	19830725

PRIORITY APPL. INFO.: R: AT, BE, CH, DE, FR, GB, IT, LI, NL
 IT 89781-39-5 DE 1982-3228842 A 19820802

RL: RCT (Reactant); RACT (Reactant or reagent)
 (acylation with, of benzene)
 RN 89781-39-5 CAPLUS
 CN 2-Butenyl chloride, 4-(diethylamino)-4-oxo-, (E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



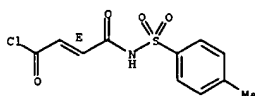


AB Attempts to develop a general method for the synthesis of the title maleimides (I) and phthalimides (II) were unsuccessful, and each compound had to be approached individually. Thus, I (R = Ac) was prepared by reaction of maleimide with Ac₂O or AcOCMe:CH₂; I (R = tosyl) was prepared by cyclization of (E)-4-MeC₆H₄(SO₂NHCOCH₃:CHCOCl; II (R = Ac, tosyl) were prepared by reaction of phthaloyl chloride with the corresponding amide.

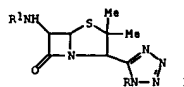
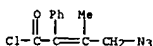
ACCESSION NUMBER: 1984:85540 CAPLUS
DOCUMENT NUMBER: 100:85540
TITLE: Synthesis of selected N-acyl and -sulfonyl derivatives of maleimides
AUTHOR(S): Kucharski, Mirosław; Lubczak, Renata
CORPORATE SOURCE: Inst. Technol. Chem., Politech. Rzeszowska, Rzeszow, Pol.
SOURCE: Rozprawy - Politechnika Rzeszowska im. Ignacego Lukaszewicza (1982), 37, 3-14
CODEN: RPRLD7; ISSN: 0208-8096
DOCUMENT TYPE: Journal
LANGUAGE: Polish
IT 88882-10-4

RL: RCT (Reactant); RACT (Reactant or reagent)
(cyclization of)
RN 88882-10-4 CAPLUS
CN 2-Butenyl chloride, 4-[(4-methylphenyl)sulfonyl]amino]-4-oxo-, (E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



L4 ANSWER 15 OF 22 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
RL: RCT (Reactant); RACT (Reactant or reagent)
(N-acylation of aminopenam deriv. by, and redn. of product from)
RN 69167-06-2 CAPLUS
CN Benzeneacetyl chloride, α-(2-azido-1-methylethylidene)- (9CI) (CA INDEX NAME)



AB Title compds. I (R = protective group, R1 = acyl), which exhibited bactericidal activity, were prepared by different methods. I (R = 4-MeOC₆H₄CH₂, R1 = H) was deprotected by CF₃CO₂H, and the product was treated with PhCH₂COCl to yield I (R = H, R1 = PhCH₂CO). Some I were obtained by cyclocondensation of N-substituted 3-penamcarboxamides with tetramethylguanidinium azide.

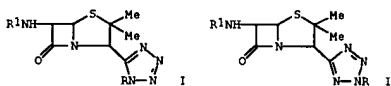
ACCESSION NUMBER: 1979:439467 CAPLUS
DOCUMENT NUMBER: 91:39467
TITLE: Antibacterial 3-(5-tetrazolyl)penam compounds
INVENTOR(S): Barth, Wayne E.
PATENT ASSIGNEE(S): Pfizer Inc., USA
SOURCE: U.S., 81 pp.
CODEN: USXKAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 10
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4143039	A	19790306	US 1977-786817	19770412
BE 821163	A1	19750417	BE 1974-1006234	19741017
ZA 7406519	A	19751126	ZA 1974-6519	19741017
AT 7408363	A	19761215	AT 1974-8363	19741017
AT 338418	B	19770825		
AT 7508843	A	19771015	AT 1975-8843	19751120
CS 193547	P	19791031	CS 1977-2901	19770503
DK 7702690	A	19770617	DK 1977-2690	19770617
DK 152502	B	19880307		
DK 152502	C	19880725		
DK 7804563	A	19781013	DK 1978-4563	19781013
DK 7804564	A	19781013	DK 1978-4564	19781013
US 4179511	A	19791218	US 1978-957197	19781101
FI 8002003	A	19800623	FI 1980-2003	19800623
FI 60398	B	19810930		
FI 60398	C	19820111		

PRIORITY APPLN. INFO.:
US 1973-407097 A2 19731017
US 1974-450435 A2 19740312
US 1974-491510 A2 19740724
US 1975-561147 A2 19750324
CS 1974-7099 A3 19741016
DK 1974-5419 A 19741016
DK 1974-5421 A 19741016
FI 1974-3024 A 19741016
AT 1974-8363 A 19741017
US 1977-786817 A3 19770412

IT 69167-06-2

L4 ANSWER 16 OF 22 CAPLUS COPYRIGHT 2005 ACS on STN
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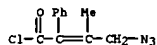
AB A series of title compds. I (R = H, trialkylsilyl, alkanoyloxymethyl, 1-alkanoyloxymethyl, 3-phthalidyl; R1 = acyl group of an organic carboxylic acid) were prepared and exhibited bactericidal activity. Thus, a 3-(N-benzylcarbamoyl)penam derivative was treated with ClSiMe₃ and COCl₂ at approx. 4°, tetramethylguanidinium azide was added, the mixture was agitated at room temperature, and the product was desilylated to give I (R = H, R1 = CPh₃) (II); II was mixed with 4-MeC₆H₄SO₃H, PhCH₂COCl was added, and the mixture was kept at pH 5.5-6.5 to give I (R = H, R1 = PhCH₂CO).

ACCESSION NUMBER: 1979:152170 CAPLUS
DOCUMENT NUMBER: 90:152170
TITLE: Antibacterial 3-(5-tetrazolyl)penam compounds
INVENTOR(S): Barth, Wayne E.
PATENT ASSIGNEE(S): Pfizer Inc., USA
SOURCE: U.S., 81 pp.
CODEN: USXKAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 10
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4115385	A	19780919	US 1977-786952	19770412
BE 821163	A1	19750417	BE 1974-1006234	19741017
ZA 7406519	A	19751126	ZA 1974-6519	19741017
AT 7408363	A	19761215	AT 1974-8363	19741017
AT 338418	B	19770825		
AT 7508843	A	19771015	AT 1975-8843	19751120
CS 193547	P	19791031	CS 1977-2901	19770503
DK 7702690	A	19770617	DK 1977-2690	19770617
DK 152502	B	19880307		
DK 152502	C	19880725		
DK 7804563	A	19781013	DK 1978-4563	19781013
DK 7804564	A	19781013	DK 1978-4564	19781013
FI 8002003	A	19800623	FI 1980-2003	19800623
FI 60398	B	19810930		
FI 60398	C	19820111		

PRIORITY APPLN. INFO.:
US 1973-407097 A2 19731017
US 1974-450435 A2 19740312
US 1974-491510 A2 19740724
US 1975-561147 A2 19750324
CS 1974-7099 A3 19741016
DK 1974-5419 A 19741016
DK 1974-5421 A 19741016
FI 1974-3024 A 19741016
AT 1974-8363 A 19741017

L4 ANSWER 16 OF 22 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 IT 69167-06-2
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (N-acylation of aminopenam derivative by)
 RN 69167-06-2 CAPLUS
 CN Benzeneacetyl chloride, α -(2-azido-1-methylethylidene)- (9CI) (CA INDEX NAME)



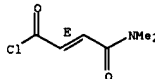
L4 ANSWER 17 OF 22 CAPLUS COPYRIGHT 2005 ACS on STN
 AB Unsaturated halogenated alcs. were esterified with α,β -unsatd. polycarboxylic acid amides to give monomers containing Cl or Br which were polymerized or copolyd. to give self-extinguishing products. Thus, 250 parts propargyl alc. [107-19-7] was brominated with a solution of 160 parts Br in 250 parts CCl_4 in 2 h at room temperature and 2 h at 30-40° to give 93% 2,3-dibromo-2-propen-1-ol (I) [7228-11-7] b0.7 51-2° 1 (200 parts) was esterified with 144 parts maleic acid mono(dimethyl)amide [2564-94-5] in 400 parts PhMe in the presence of 0.5 part toluenesulfonic acid and 1 part tert-butylcatechol to give $\text{Me}_2\text{NOCCH:CHCO}_2\text{CH}_2\text{CBr:CHBr}$ (II) [61846-20-6] containing 46.5% Br. A mixture of 94 parts Me methacrylate and 6 parts II was copolyd. 24 h at 80° and 18 h at 100° in the presence of 0.5 part E2202 to give a self-extinguishing copolymer soluble in CHCl_3 , benzene, and PhMe.

ACCESSION NUMBER: 1977:107206 CAPLUS
 DOCUMENT NUMBER: 86:107206
 TITLE: Unsaturated ester-amides of halogenated alkenes
 INVENTOR(S): D'Allelio, Gaetano F.
 PATENT ASSIGNEE(S): USA
 SOURCE: U.S., 11 pp. Division of U.S. 3,950,392.
 CODEN: USXXAM
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 4
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4000358	A	19761228	US 1976-646642	19760105
US 3637813	A	19720125	US 1968-785336	19681219
US 3823183	A	19740709	US 1971-198949	19711115
US 3950392	A	19760413	US 1974-432851	19740114

PRIORITY APPLN. INFO.:
 US 1968-785336 A3 19681219
 US 1971-198949 A2 19711115
 US 1974-432851 A3 19740114

IT 61853-52-9
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction of, with dichloropropanol)
 RN 61853-52-9 CAPLUS
 CN 2-Butenyl chloride, 4-(dimethylamino)-4-oxo-, (E)- (9CI) (CA INDEX NAME)
 Double bond geometry as shown.

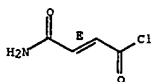


L4 ANSWER 18 OF 22 CAPLUS COPYRIGHT 2005 ACS on STN
 AB Unsaturated ester amides of α,β -unsatd. polycarboxylic acids esterified by halogenated alcs. are useful for the synthesis of flame retardant polymers as well as plasticizers and fireproofing agents for polymeric and nonpolymeric materials. Thus, a mixture of 145 parts 1,2,3-trichloropropene [96-19-5] in 900 parts H_2O containing 106 parts Na_2CO_3 was refluxed 10 hr to give 115 parts 2,3-dichloro-2-propen-1-ol (I) [2736-73-4]. A mixture of 127 parts I and 144 parts maleic acid monodimethylamide [2564-94-5] in 400 parts toluene containing 0.50 part toluenesulfonic acid and 1 part tert-butyl catechol was refluxed while distilling H_2O to give a 90% yield of $\text{Me}_2\text{NOCCH:CHCO}_2\text{CH}_2\text{C}(\text{Cl})\text{CHCl}$ [59571-15-2]. A mixture of 94 parts Me methacrylate and 6 parts $\text{Me}_2\text{NOCCH}_2\text{CHCOCH}_2\text{C}(\text{Br})\text{CHBr}$ was polymerized to give a self-extinguishing polymer [59596-02-0].
 ACCESSION NUMBER: 1976:447608 CAPLUS
 DOCUMENT NUMBER: 85:47608
 TITLE: Unsaturated ester-amides of halogenated alkenes
 INVENTOR(S): D'Allelio, Gaetano F.
 PATENT ASSIGNEE(S): USA
 SOURCE: U.S., 11 pp. Continuation-in-part of U.S. 3,823,183.
 CODEN: USXXAM
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 4
 PATENT INFORMATION:

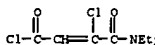
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3950392	A	19760413	US 1974-432851	19740114
US 3637813	A	19720125	US 1968-785336	19681219
US 3823183	A	19740709	US 1971-198949	19711115
US 4000358	A	19761228	US 1976-646642	19760105

PRIORITY APPLN. INFO.:
 US 1968-785336 A3 19681219
 US 1971-198949 A2 19711115
 US 1974-432851 A3 19740114

IT 59571-18-5
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction of, with dichloropropanol)
 RN 59571-18-5 CAPLUS
 CN 2-Butenyl chloride, 4-amino-4-oxo-, (E)- (9CI) (CA INDEX NAME)
 Double bond geometry as shown.



L4 ANSWER 19 OF 22 CAPLUS COPYRIGHT 2005 ACS on STN
 GI For diagram(s), see printed CA Issue.
 AB Pyrazolophthalazinediones I (R = Cl, Me, Bu, Et, Pr, Ph; NR1R2 = NMe2, NMePh, NMeCH2Ph, NET2, NEtCH2Ph, N(CH2CH2Cl)2, NPr2, NBU2, N(CH2Ph)2, 1-pyrrolidinyl, piperidino, morpholino) were prepared by condensing 3,4-dihydro-1(2H)-phthalazinone with ClCOCR:CClNR1R2 . I (R = Cl) were reductively dechlorinated to I (R = H). Other I were N-acylated, and I (NR1R2 = NMeCH2Ph, NEtCH2Ph, N(CH2Ph)2) were debenzylated.
 ACCESSION NUMBER: 1975:531538 CAPLUS
 DOCUMENT NUMBER: 83:131538
 TITLE: Cyclic hydrazides. II. Synthesis of 3-aminopyrazolo[1,2-b]phthalazine-1(1H),5(10H)-diones
 Winters, G.; Di Mola, N.; Oppici, E.; Nathansohn, G.
 CORPORATE SOURCE: Lab. Ric., Gruppo Lepetit S.p.A., Milan, Italy
 SOURCE: Farmaco, Edizione Scientifica (1975), 30(8), 620-30
 CODEN: FRPSAX; ISSN: 0430-0920
 DOCUMENT TYPE: Journal
 LANGUAGE: Italian
 OTHER SOURCE(S): CASREACT 83:131538
 IT 57243-86-4P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation and condensation of, with dihydrophthalazinone)
 RN 57243-86-4 CAPLUS
 CN 2-Butenyl chloride, 3-chloro-4-(diethylamino)-4-oxo- (9CI) (CA INDEX NAME)

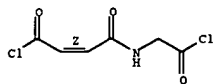


L4 ANSWER 20 OF 22 CAPLUS COPYRIGHT 2005 ACS on STN
 GI For diagram(s), see printed CA Issue.
 AB HO2CCH:CHCONHCH2CO2H in POC13 reacted with PC15 to give maleoylglycyl chloride and a small amount of ClOCC:CHCONHCH2COCl. HO2C(CH2)3CONHCH2CO2H showed no similar reaction but reacted with Ac2O to give glutarylglutamine anhydride (I).

ACCESSION NUMBER: 1967:499606 CAPLUS
 DOCUMENT NUMBER: 67:99606
 TITLE: Synthesis of maleoyl- and glutarylglutyl chlorides
 AUTHOR(S): Paul, Lieselotte; Dittmar, Adelheid; Rusch, Christel
 CORPORATE SOURCE: Humboldt-Univ., Berlin, Fed. Rep. Ger.
 SOURCE: Chemische Berichte (1967), 100(8), 2757-60
 CODEN: CHBEAM; ISSN: 0009-2940

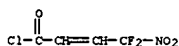
DOCUMENT TYPE: Journal
 LANGUAGE: German
 OTHER SOURCE(S): CASREACT 67:99606
 IT 18366-16-OP
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 18366-16-0 CAPLUS
 CN Maleamoyl chloride, N-[(chloroformyl)methyl]- (8CI) (CA INDEX NAME)

Double bond geometry as shown.



L4 ANSWER 21 OF 22 CAPLUS COPYRIGHT 2005 ACS on STN
 AB Keeping 15.2 g. NO2 and 22 g. CF2:CHCH:CF2 at 0° 1 hr. and 12 hrs. at room temperature gave 20% O2NCF2CH:CHCF2ONO (I), b18 63-5°, 2 g. O2NCF2CO2H, 47% O2NCF2CH:CHCF2NO2 (II), b10 64-5°, d20 1.5845, n20D 1.3865, 2.6 g. O2NCF2CH:CHCO2H, m. 38-40°, b1 88°, and 28% polymeric residue. A similar mixture was formed in a 2-day reaction at room temperature 1 and 2 moles ROH gave 68% O2NCF2CH:CHCO2R: R = Et, b4 64°, 1.3346, 1.4040; R = Me, b7 60-2°, 1.4044, 1.4010. Treatment of the nitrite (I) with ice gave O2NCF2CH:CHCO2H, m. 38°, which with PC15 gave the acyl chloride, b50 72°, 1.5494, 1.4322; amide m. 110°, formed by treatment of the chloride with NH3. The free acid and Ag2CO3 in C6H6 in 0.5 hr. at reflux gave 85% O2NCF2CH:CHCO2Ag, decomposed 152°. II was oxidized with KMnO4 to 36% O2NCF2H, b. 42.5°, 1.4661, 1.3168; oxidation at 0-5° gave 18% O2NCF2CO2H and 32% [O2NCF2CH(OH)]2, b3 107°, 1.7989, 1.4083. The nitration mechanism is probably: O2N· + CF2:CHCH:CF2 → O2NCF2CH:CHF2· + (with ·NO2) O2NCF2CH:CHCF2NO2, or (with ·ONO) O2NCF2CH:CHCF2ONO; O2NCF2CH:CHF2· dimerizes to [O2NCF2CH:CHCF2]2 (III). III is the presumed structure of the compound which forms the distillation residue mentioned above.

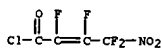
ACCESSION NUMBER: 1967:443329 CAPLUS
 DOCUMENT NUMBER: 67:43329
 TITLE: Nitration of 1,4,4,4-tetrafluorobutadiene with nitrogen dioxide
 AUTHOR(S): Fokin, A. V.; Kosyrev, Yu. M.; Sorochkin, I. N.; Radchenko, V. P.
 SOURCE: Zhurnal Obshchei Khimii (1967), 37(3), 633-6
 CODEN: ZOKH44; ISSN: 0044-460X
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian
 IT 16356-17-SP
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 16356-17-5 CAPLUS
 CN Crotonoyl chloride, 4,4-difluoro-4-nitro- (8CI) (CA INDEX NAME)



L4 ANSWER 22 OF 22 CAPLUS COPYRIGHT 2005 ACS on STN
 AB cf. CA 52, 6154d. Perfluorobutadiene (64 g.) and 30 g. N2O4 kept in an autoclave 1 day at room temperature gave 91% addition products, which were separated

into the following: 1.1% O2NCF2COF, b. 16°; 15% O2NCF2CF:CFCF2ONO (I), b. 100-1°, d20 1.6310, n20D 1.3590; 46.5% (:CFCF2NO2)2 (II), b75 55-6°, 1.5760, 1.3660; 17.5% O2NCF2CF:CFCO2H (IIa), b4 93°, 1.6810, 1.4072, and various telomerization products. II kept with N2O4 in an autoclave 7 h. at 100° gave O2NCF2COF, isolated as O2NCF2CO2Me, b100 52°, after treatment with MeOH. I and 2 mol of the appropriate alc. readily gave the following O2NCF2CF:CFCO2R after 0.5 h. on a steam bath (R shown): Me, b20 62°, 1.5132, 1.3852; Et, b20 78°, 1.4431, 1.3905; isoPr, b10 50°, 1.4170, 1.3916; Bu, b5 50°, 1.3320, 1.3990; iso-Am, b3 75°, 1.2870, 1.4100; C6H11, b3 102°, 1.3370, 1.4275. The free acid and PC15 gave 64% O2NCF2CF:CFCOCl, b80 65°, 1.6500, 1.4095, which with NH3 at -50° in Et2O gave the amide (III), m. 80°. III and P2O5 distilled with an open flame gave the lachrymatory nitrile, b. 97-9°, 1.5120, 1.3720. IIa and Ag2CO3 in C6H6, finally at reflux 0.5 h., gave after filtration and evaporation 83% Ag salt, decomposed 210°. IIa also gave the K salt, decomposed 170°, yellow solid.

ACCESSION NUMBER: 1964:22965 CAPLUS
 DOCUMENT NUMBER: 60:22965
 ORIGINAL REFERENCE NO.: 60:4005b-d
 TITLE: Nitration of perfluorobutadiene with nitrogen dioxide
 AUTHOR(S): Khunyan, I. L.; Fokin, A. V.; Kosyrev, Yu. M.; Sorochkin, I. N.; Prokina, K. V.
 SOURCE: Izvestiya Akademii Nauk SSSR, Seriya Khimicheskaya (1963), (10), 1772-5
 CODEN: IASKA6; ISSN: 0002-3353
 DOCUMENT TYPE: Journal
 LANGUAGE: Unavailable
 IT 2261-33-8, Crotonoyl chloride, 2,3,4,4-tetrafluoro-4-nitro- (preparation of)
 RN 2261-33-8 CAPLUS
 CN Crotonoyl chloride, 2,3,4,4-tetrafluoro-4-nitro- (7CI, 8CI) (CA INDEX NAME)



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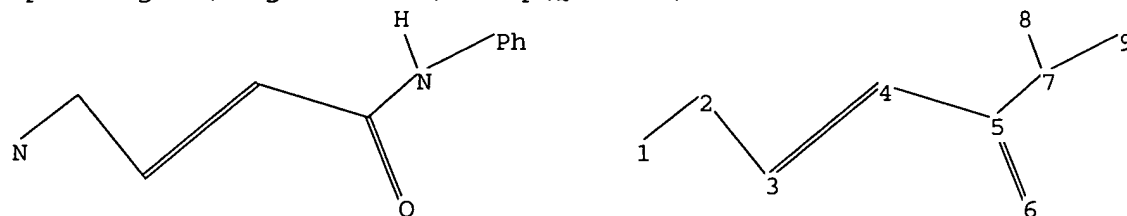
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chain nodes :
 1 2 3 4 5 6 7 8 9
 chain bonds :
 1-2 2-3 3-4 4-5 5-6 5-7 7-8 7-9

exact/norm bonds :

1-2 5-6 5-7

exact bonds :

2-3 3-4 4-5 7-8 7-9

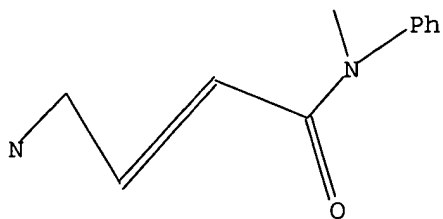
Match level :

1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS 7:CLASS 8:CLASS 9:CLASS

L5 STRUCTURE UPLOADED

=> d query

L5 STR



Structure attributes must be viewed using STN Express query preparation.

=> s 15

SAMPLE SEARCH INITIATED 19:33:58 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 168 TO ITERATE

100.0% PROCESSED 168 ITERATIONS

8 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

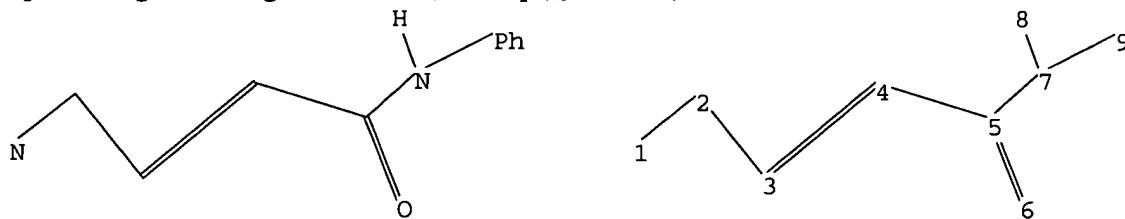
PROJECTED ITERATIONS: 2583 TO 4137

PROJECTED ANSWERS: 8 TO 329

L6 8 SEA SSS SAM L5

=>

Uploading C:\Program Files\Stnexp\Queries\10758187.str



chain nodes :

1 2 3 4 5 6 7 8 9

chain bonds :

1-2 2-3 3-4 4-5 5-6 5-7 7-8 7-9
 exact/norm bonds :
 1-2 5-6 5-7
 exact bonds :
 2-3 3-4 4-5 7-8 7-9

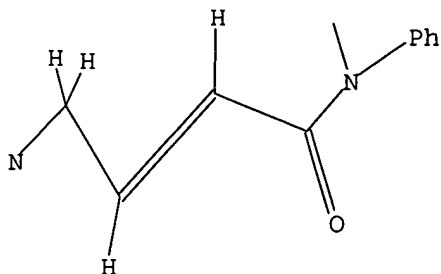
Match level :

1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS 7:CLASS 8:CLASS 9:CLASS

L7 STRUCTURE UPLOADED

=> d query

L7 STR



Structure attributes must be viewed using STN Express query preparation.

=> s 17

SAMPLE SEARCH INITIATED 19:35:02 FILE 'REGISTRY'
 SAMPLE SCREEN SEARCH COMPLETED - 168 TO ITERATE

100.0% PROCESSED 168 ITERATIONS
 SEARCH TIME: 00.00.01

0 ANSWERS

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
 BATCH **COMPLETE**

PROJECTED ITERATIONS: 2583 TO 4137
 PROJECTED ANSWERS: 0 TO 0

L8 0 SEA SSS SAM L7

=> s 17 full

FULL SEARCH INITIATED 19:35:07 FILE 'REGISTRY'
 FULL SCREEN SEARCH COMPLETED - 3534 TO ITERATE

100.0% PROCESSED 3534 ITERATIONS
 SEARCH TIME: 00.00.01

1 ANSWERS

L9 1 SEA SSS FUL L7

=> fil caplus

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

FULL ESTIMATED COST	ENTRY 163.05	SESSION 436.87
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-16.06

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FILE COVERS 1907 - 28 Apr 2005 VOL 142 ISS 18
 FILE LAST UPDATED: 27 Apr 2005 (20050427/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

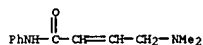
This file contains CAS Registry Numbers for easy and accurate substance identification.

```
=> s 19
L10      1 L9

=> d l10 abs ibib hitstr
```

L10 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2005 ACS on STN
 AB The invention provides the use of a combination of CCI-779 and EKB-569
 (preparation described) in the treatment of neoplasms.
 ACCESSION NUMBER: 2003:202467 CAPLUS
 DOCUMENT NUMBER: 138:231711
 TITLE: Antineoplastic combinations of CCI-779 and EKB-569
 INVENTOR(S): Rabin dran, Sridhar Krishna; Gibbons, James J., Jr.
 PATENT ASSIGNEE(S): Wyeth, John, and Brother Ltd., USA
 SOURCE: PCT Int. Appl., 31 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003020266	A1	20030313	WO 2002-US24841	20020806
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM NW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2003050222	A1	20030313	US 2002-212889	20020806
US 6617333	B2	20030909		
EP 1414438	A1	20040506	EP 2002-769432	20020806
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
BR 2002011769	A	20040727	BR 2002-11769	20020806
JP 200505549	T2	20050224	JP 2003-524573	20020806
PRIORITY APPLN. INFO.:			US 2001-310646P	P 20010807
			WO 2002-US24841	W 20020806
IT 501332-26-9P RL: SPN (Synthetic preparation); PREP (Preparation) (CCI-779 and EKB-569 antineoplastic combination)				
RN 501332-26-9 CAPLUS				
CN 2-Butenamide, 4-(dimethylamino)-N-phenyl- (9CI) (CA INDEX NAME)				



REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
=> fil reg
COST IN U.S. DOLLARS          SINCE FILE      TOTAL
                                ENTRY      SESSION
FULL ESTIMATED COST          5.84      442.71

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)  SINCE FILE      TOTAL
                                                ENTRY      SESSION
CA SUBSCRIBER PRICE          -0.73      -16.79
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FILE 'REGISTRY' ENTERED AT 19:36:04 ON 28 APR 2005
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Property values tagged with IC are from the ZIC/VINITI data file
 provided by InfoChem.

STRUCTURE FILE UPDATES: 27 APR 2005 HIGHEST RN 849400-77-7
 DICTIONARY FILE UPDATES: 27 APR 2005 HIGHEST RN 849400-77-7

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005

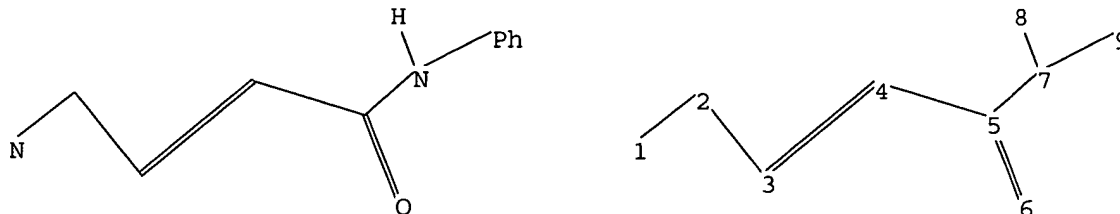
Please note that search-term pricing does apply when
 conducting SmartSELECT searches.

```
*****
*
* The CA roles and document type information have been removed from *
* the IDE default display format and the ED field has been added,  *
* effective March 20, 2005. A new display format, IDERL, is now   *
* available and contains the CA role and document type information. *
*
*****
```

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more
 information enter HELP PROP at an arrow prompt in the file or refer
 to the file summary sheet on the web at:
<http://www.cas.org/ONLINE/DBSS/registryss.html>

```
=>
Uploading C:\Program Files\Stnexp\Queries\10758187.str
```



```
chain nodes :
1 2 3 4 5 6 7 8 9
chain bonds :
1-2 2-3 3-4 4-5 5-6 5-7 7-8 7-9
```

exact/norm bonds :

1-2 5-6 5-7

exact bonds :

2-3 3-4 4-5 7-8 7-9

Match level :

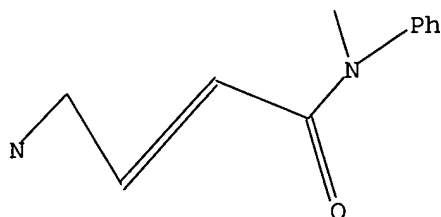
1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS 7:CLASS 8:CLASS 9:CLASS

L11 STRUCTURE UPLOADED

=> d query

L11

STR



Structure attributes must be viewed using STN Express query preparation.

=> s l11

SAMPLE SEARCH INITIATED 19:36:22 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 168 TO ITERATE

100.0% PROCESSED 168 ITERATIONS

8 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS: 2583 TO 4137

PROJECTED ANSWERS: 8 TO 329

L12 8 SEA SSS SAM L11

=> s l11 full

FULL SEARCH INITIATED 19:36:27 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 3534 TO ITERATE

100.0% PROCESSED 3534 ITERATIONS

141 ANSWERS

SEARCH TIME: 00.00.01

L13 141 SEA SSS FUL L11

=> fil caplus

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

161.33

604.04

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-16.79

FILE 'CAPLUS' ENTERED AT 19:36:30 ON 28 APR 2005
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FILE COVERS 1907 - 28 Apr 2005 VOL 142 ISS 18
 FILE LAST UPDATED: 27 Apr 2005 (20050427/ED)

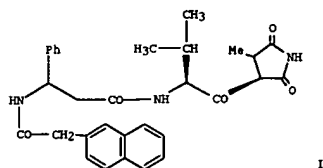
New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s l13

L14 83 L13

=> d l14 1-83 abs ibib hitstr



I

AB The invention relates to the title substances, e.g. (I), their stereoisomeric or diastereoisomeric forms, and their salt, solvates, or solvates of salts, as well as a method for producing them, pharmaceutical compns. comprising them and the use thereof in the treatment and/or prophylaxis of human or animal diseases, especially bacterial infectious diseases. I was prepared by, first, substitution of the oxygen atom in (3S)-3-methyl-dihydro-2,5-furandione with an amine, e.g., benzyloxy amine, N,N-di-Me hydrazine, or benzyloxycarbonyl hydrazine, followed by reaction with Boc-L-valine, and deprotection of the ring amine substituent or ring nitrogen atom. Reaction of the resulting pyrrolidine derivative with a suitable β -amino acid segment, (e.g., [S]-3-phenyl-3-(Boc-amino)propionic acid, preparation given), followed by Boc-deprotection and reaction with an appropriate acid, (e.g., 2-naphthyl acetic acid), gave, e.g., 1. In in vitro tests against *S. aureus* 133, I had minimal blood concentration level of <5 μ M/l.

ACCESSION NUMBER: 2004:1154667 CAPLUS

DOCUMENT NUMBER: 142:56673

TITLE: Synthesis of moiramide B analogs for use in the prevention or treatment of bacterial infection in humans or animals

INVENTOR(S): Brunner, Nina; Freiberg, Christoph; Lampe, Thomas; Newton, Ben; Ottenseder, Michael; Pernerstorfer, Josef; Pohlmann, Jens; Schiffer, Guido; Shimada, Mitsuyuki; Svenstrup, Niels; Endermann, Rainer; Nell, Peter

PATENT ASSIGNEE(S): Bayer Healthcare AG, Germany

SOURCE: PCT Int. Appl., 76 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004113290	A1	20041229	WO 2004-EP5989	20040603
W: AB, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CP, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,				

AB An aza-Michael addition between a maleimide and amines is described in which the presence of simple amine receptors [TMEDA or trans-TMCDA (trans-TMCDA = trans-N,N,N',N'-tetramethylcyclohexanediamine)] promote the chemoselectivity of the reaction (resp., 1,2- and 1,4-addition). Addnl., both receptors are able to accelerate the reaction. Stoichiometries of complexes between receptors and amines were determined by 1H NMR dilution expts.

while enantiomeric excesses were observed on 1,4-adducts by using (1R,2R)-TMCDA.

ACCESSION NUMBER: 2004:1048880 CAPLUS

DOCUMENT NUMBER: 142:134408

TITLE: Chemoselective, accelerated and stereoselective aza-Michael addition of amines to N-phenylmaleimide by using TMEDA based receptors

AUTHOR(S): Bi, Yuefeng; Bailly, Laetitia; Marsais, Francis; Levaucher, Vincent; Papanicolas, Cyril; Dupas, Georges

CORPORATE SOURCE: UMR 6014 IRCOF, CNRS, Universite et INSA de Rouen, Mont-Saint-Aignan, 76131, Fr.

SOURCE: Tetrahedron: Asymmetry (2004), 15(23), 3703-3706

CODEN: TASYE3; ISSN: 0957-4166

PUBLISHER: Elsevier B.V.

DOCUMENT TYPE: Journal

LANGUAGE: English

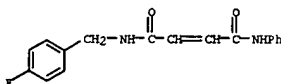
IT 268739-00-0P 827314-35-2P 827314-38-5P

827314-41-0P

RL: SPN (Synthetic preparation); PREP (Preparation) (chemoselective, accelerated and stereoselective aza-Michael addition of amines to N-phenylmaleimide by using TMEDA based receptors)

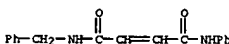
RN 268739-00-0 CAPLUS

CN 2-Butenediamide, N-[(4-fluorophenyl)methyl]-N'-phenyl- (9CI) (CA INDEX NAME)



RN 827314-35-2 CAPLUS

CN 2-Butenediamide, N-phenyl-N'-(phenylmethyl)- (9CI) (CA INDEX NAME)



RN 827314-38-5 CAPLUS

CN 2-Butenediamide, N-[(4-methylphenyl)methyl]-N'-phenyl- (9CI) (CA INDEX NAME)

NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

DE 10326918 A1 20050217 DE 2003-10326918 20030616
PRIORITY APPLN. INFO.: DE 2003-10326918 A 20030616

OTHER SOURCE(S): MARPAT 142:56673

IT 811461-29-7P

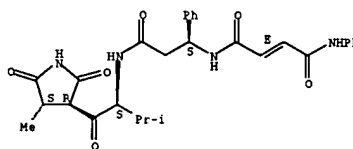
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of moiramide B analogs for use in the prevention or treatment of bacterial infection in humans or animals)

RN 811461-29-7 CAPLUS

CN 2-Butenediamide, N-[(1S)-3-[[[(1S)-2-methyl-1-[[[(3R,4S)-4-methyl-2,5-dioxo-3-pyrrolidinyl]carbonyl]propyl]amino]-3-oxo-1-phenylpropyl]-N'-phenyl-, (2E)- (9CI) (CA INDEX NAME)

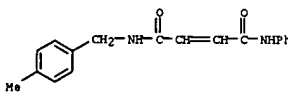
Absolute stereochemistry.

Double bond geometry as shown.



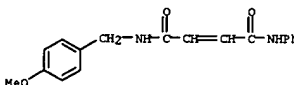
REFERENCE COUNT: 5

THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT



RN 827314-41-0 CAPLUS

CN 2-Butenediamide, N-[(4-methoxyphenyl)methyl]-N'-phenyl- (9CI) (CA INDEX NAME)

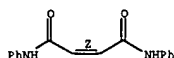


REFERENCE COUNT: 21

THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 3 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN
 AB In the presence of equivalent amts. of triphenylphosphine and N,N'-dibromo-N,N'-1,2-ethanedithiolbis(p-toluenesulfonamide) ester and amide compds. can be generated in high yields from the corresponding carboxylic acid and alcs. or amines at room temperature For example, 93% Me benzoate was obtained from methanol and benzoic acid; 94% 3-O2NC6H4NHC(O)CH2CH2C(O)NHC6H4NO2-3 was obtained from butanedioic acid and 3-nitroaniline.
 ACCESSION NUMBER: 2004:921869 CAPLUS
 DOCUMENT NUMBER: 142:218736
 TITLE: The application of N,N'-dibromo-N,N'-1,2-ethanedithiolbis(p-toluenesulfonamide) as a powerful reagent for conversion of carboxylic acids into esters and amides with triphenylphosphine
 AUTHOR(S): Khazaei, Ardeshir; Mallakpour, Shadpour; Zolfigol, Mohammad Ali; Ghorbani-Vaghei, Ramin; Kolvari, Eskandar
 CORPORATE SOURCE: Department of Chemistry, Faculty of Science, Bu-Ali Sina University, Hamedan, Iran
 SOURCE: Phosphorus, Sulfur and Silicon and the Related Elements (2004), 179(9), 1715-1721
 CODEN: PSSLEC ISSN: 1042-6507
 PUBLISHER: Taylor & Francis, Inc.
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 IT 59411-44-8P, N,N'-Diphenylmaleimide
 RL: SPN (Synthetic preparation); PREP (Preparation) (application of N,N'-dibromo-N,N'-1,2-ethanedithiolbis(p-toluenesulfonamide) as powerful reagent for conversion of carboxylic acids into esters and amides with triphenylphosphine)
 RN 59411-44-8 CAPLUS
 CN 2-Butenediamide, N,N'-diphenyl-, (2Z)- (9CI) (CA INDEX NAME)

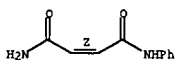
Double bond geometry as shown.



REFERENCE COUNT: 48 THERE ARE 48 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

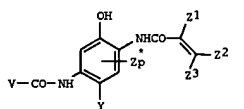
L14 ANSWER 4 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN
 AB Amines as amine hydrochlorides are efficiently acylated with anhydrides in an aqueous medium on addition of NaHCO3. Both cyclic and acyclic anhydrides react with equal ease with an amine and amines of various stereo-electronic factors react with the same rates with an anhydride. No chromatog. separation is needed for isolation of the acylated product. Reactions in aqueous medium, innocuous byproducts and chemoselective acylation of amines in the presence of phenols and thiols were achieved with high selectivity.
 ACCESSION NUMBER: 2004:457608 CAPLUS
 DOCUMENT NUMBER: 141:331896
 TITLE: Mild and eco-friendly chemoselective acylation of amines in aqueous medium
 AUTHOR(S): Naik, Sarala; Bhattacharjya, Gitalee; Kavala, Veerababu Rao; Patel, Bhisma K.
 CORPORATE SOURCE: Department of Chemistry, Indian Institute of Technology, Guwahati, 781 039, India
 SOURCE: ARKIVOC (Gainesville, FL, United States) (2004), (1), 55-63
 CODEN: AGPUAR
 URL: http://www.arkat-usa.org/ark/journal/2004/GeneralPart(1)/03-954B/954B.pdf
 PUBLISHER: Arkat USA Inc.
 DOCUMENT TYPE: Journal (online computer file)
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 141:331896
 IT 14668-80-5P, N-Phenylmaleimide
 RL: SPN (Synthetic preparation); PREP (Preparation) (acylation of amines with anhydrides in aqueous medium)
 RN 14668-80-5 CAPLUS
 CN 2-Butenediamide, N-phenyl-, (2Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



REFERENCE COUNT: 43 THERE ARE 43 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 5 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN
 GI



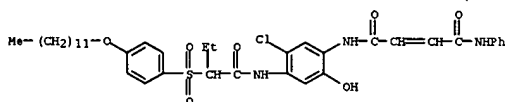
AB Disclosed is a photog. paper comprising a light-sensitive silver halide emulsion layer associated with a cyan coupler having the general formula I
 (V) = sulfone, sulfoxide, sulfonamide-containing group; Y = H, or a coupling-off group; Z1, Z2, Z3 and Z4 = substituents with p = 0-2, and as further disclosed in the claims; provided that Z1, and Z2 or Z2 and Z3 can join to form a ring; provided further that Z1, and Z2 do not join to form an aromatic or heterocyclic ring; and provided further that the combined sum of the aliphatic carbon atoms in V, all Z is at least 8, that forms a dye with the developer 4-amino-3-methyl-N-ethyl-N-(2-methanesulfonamidoethyl) aniline sesquisulfate hydrate for which the left bandwidth (LBW) using spin-coating is at least 5 nm less than that of the same dye in solution form. The cyan coupler of the invention exhibits advantageous solubility in photog. coupler solvents, and the dye formed in the paper exhibits an advantageous dye hue in having a reduced level of unwanted absorption on the short wavelength side of the spectrum and increased stability.

ACCESSION NUMBER: 2004:113490 CAPLUS
 DOCUMENT NUMBER: 140:172094
 TITLE: Photographic color paper comprising cyan coupler and development process
 INVENTOR(S): Begley, William J.; Thomas, Brian; Andrievsky, Natasha
 PATENT ASSIGNEE(S): Eastman Kodak Company, USA
 SOURCE: U.S., 28 pp.
 CODEN: USXKAM
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

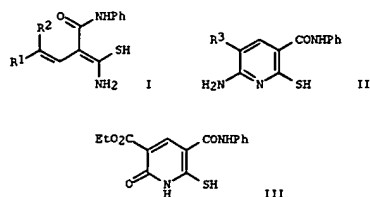
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6689549	B1	20040210	US 2002-316578	20021211
PRIORITY APPLN. INFO.:			US 2002-316578	20021211

OTHER SOURCE(S): MARPAT 140:172094
 IT 656807-92-0
 RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
 (coupler; photog. color paper comprising cyan coupler and development process)
 RN 656807-92-0 CAPLUS
 CN 2-Butenediamide, N-[5-chloro-4-[[[4-(dodecyloxy)phenyl]sulfonyl]-1-oxobutyl]amino]-2-hydroxyphenyl]-N'-phenyl- (9CI) (CA INDEX NAME)

L14 ANSWER 5 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



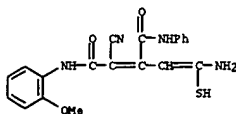
REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT



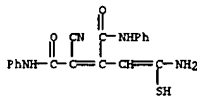
AB Reactions of (ethoxymethylidene)malonic acid derivs. R1R2C:CHOEt (R1 = R2 = EtO2C; R1 = CN, R2 = EtO2C, PhNHCO, 4-phenyl-2-thiazolyl, etc.) with thioacetamide PhNHCOCH2C(S)NH2 in the presence of a base gave the products of nucleophilic vinylic substitution, 1,3-butadiene-1-thiolates I (R1 = CN; R2 = EtO2C, PhNHCO, 2-MeOC6H4NHCO, etc.), 2-aminopyridines II (R3 = 3-MeOC6H4NHCO, 4-phenylthiazol-2-yl) or pyridinone III depending on the nature of R1 and R2 substituents. I, II, and III were further transformed into a variety of highly functionalized 2-(alkylthio)pyridines.

ACCESSION NUMBER: 2004:108496 CAPLUS
DOCUMENT NUMBER: 141:350008
TITLE: Synthesis and some reactions of substituted N-phenylnicotinamides.
AUTHOR(S): Dyachenko, V. D.; Tkachev, R. P.
CORPORATE SOURCE: Ukraine
SOURCE: Vysnik Kharkivs'kogo Natsional'nogo Universitetu im. V. N. Karazina (2002), 549, 50-56
CODEN: VYNUAK
PUBLISHER: Kharkivs'kii Natsional'nii Universitet im. V. N. Karazina
DOCUMENT TYPE: Journal
LANGUAGE: Russian

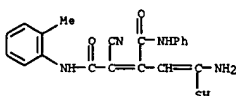
IT 775325-33-2P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of functionalized alkylthio-substituted pyridinecarboxamides from (phenylcarbamoyl)thioacetamide and (ethoxymethylidene)malonic acid derivs.)
RN 775325-33-2 CAPLUS
CN 2-Butenediamide, 2-(2-amino-2-mercaptoethenyl)-3-cyano-N4-(2-methoxyphenyl)-N1-phenyl- (9CI) (CA INDEX NAME)



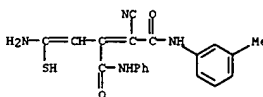
IT 775325-30-9P 775325-31-0P 775325-32-1P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of functionalized alkylthio-substituted pyridinecarboxamides from (phenylcarbamoyl)thioacetamide and (ethoxymethylidene)malonic acid derivs.)
RN 775325-30-9 CAPLUS
CN 2-Butenediamide, 2-(2-amino-2-mercaptoethenyl)-3-cyano-N4-(2-methylphenyl)-N1-phenyl- (9CI) (CA INDEX NAME)



RN 775325-31-0 CAPLUS
CN 2-Butenediamide, 2-(2-amino-2-mercaptoethenyl)-3-cyano-N4-(2-methylphenyl)-N1-phenyl- (9CI) (CA INDEX NAME)



RN 775325-32-1 CAPLUS
CN 2-Butenediamide, 2-(2-amino-2-mercaptoethenyl)-3-cyano-N4-(3-methylphenyl)-N1-phenyl- (9CI) (CA INDEX NAME)



L14 ANSWER 7 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN
AB The invention provides the use of a combination of CCI-779 and EKB-569 (preparation described) in the treatment of neoplasms.

ACCESSION NUMBER: 2003:202467 CAPLUS
DOCUMENT NUMBER: 138:231711
TITLE: Antineoplastic combinations of CCI-779 and EKB-569
INVENTOR(S): Rabindran, Sridhar Krishna; Gibbons, James J., Jr.
PATENT ASSIGNEE(S): Wyeth, John, and Brother Ltd., USA
SOURCE: PCT Int. Appl., 31 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003020266	A1	20030313	WO 2002-US24841	20020806
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GR, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
US 2003050222	A1	20030313	US 2002-212889	20020806
US 6617333	B2	20030909		
EP 1414438	A1	20040506	EP 2002-768432	20020806
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, HK, CY, AL, TR, BG, CZ, EE, SK			
BR 2002011769	A	20040727	BR 2002-11769	20020806
JP 200505549	T2	20050224	JP 2003-524573	20020806
PRIORITY APPLN. INFO.:			US 2001-310646P	P 20010807
			WO 2002-US24841	W 20020806

IT 501332-26-9P
RL: SPN (Synthetic preparation); PREP (Preparation)
(CCI-779 and EKB-569 antineoplastic combination)
RN 501332-26-9 CAPLUS
CN 2-Butenediamide, 4-(dimethylamino)-N-phenyl- (9CI) (CA INDEX NAME)



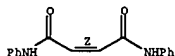
REFERENCE COUNT: 6
THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 8 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN
 AB A flux for a Pb-free solder comprises 80-95% rosin and 5-20% activator containing a mixture of ≥ 2 from oxy acids, carboxylic acids, and anilides. The solder is preferably a Sn-Ag solder.
 ACCESSION NUMBER: 2002:19446 CAPLUS
 DOCUMENT NUMBER: 136:73111
 TITLE: Flux for lead-free solder
 INVENTOR(S): Katayama, Eiji; Kaneko, Yoshihiro; Kikuchi, Osamu
 PATENT ASSIGNEE(S): Fujikura Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.
 CODEN: JKKOAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

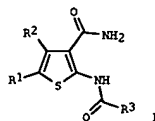
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002001581	A2	20020108	JP 2000-186707	20000621
JP 2000-186707			20000621	

PRIORITY APPLN. INFO.:
 IT 59411-44-8, Maleanilide
 RL: NUU (Other use, unclassified); USES (Uses)
 (in flux for lead-free solder)
 RN 59411-44-8 CAPLUS
 CN 2-Butenediamide, N,N'-diphenyl-, (2Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



L14 ANSWER 9 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN
 GI

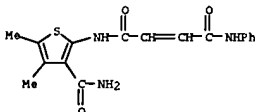


AB The title compds. [1; R1, R2 = H, halo, aryl, etc.; or R1 and R2 taken together form (CH2)m(NR4)n(CH2)p (wherein m, p = 1-3; n = 0-1; m + n + p = 3-5; R4 = H, alkyl); R3 = alkyl, alkenyl, aryl, etc.], useful in the treatment of diseases caused by and/or associated with an altered protein kinase activity such as cancer, cell proliferative disorders, Alzheimer's disease, viral infections, auto-immune diseases and neurodegenerative disorders (no data given), were prepared. Thus, amidation of 2-amino-3-carbamoyl-4,5,6,7-tetrahydrobenzo[b]thiophene with phenylacetic acid afforded 1 [R1R2 = (CH2)4; R3 = CH2Ph].

ACCESSION NUMBER: 2001:93593 CAPLUS
 DOCUMENT NUMBER: 136:69729
 TITLE: Preparation of thiophene-3-carboxamides as kinase inhibitors
 INVENTOR(S): Fancelli, Daniele; Pevarello, Paolo; Varasi, Mario
 PATENT ASSIGNEE(S): Pharmacia & Upjohn S.p.A., Italy
 SOURCE: PCT Int. Appl., 85 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001098290	A2	20011227	WO 2001-EP6763	20010614
WO 2001098290	A3	20020516		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, BG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, T2, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CH, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 6414013	B1	20020702	US 2000-596550	20000619
CA 2414085	AA	20011227	CA 2001-2414085	20010614
AU 2001085745	A5	20020102	AU 2001-85745	20010614
EP 1294707	A2	20030326	EP 2001-964983	20010614
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, HK, CY, AL, TR				
JP 2004501146	T2	20040115	JP 2002-504246	20010614
PRIORITY APPLN. INFO.:			US 2000-596550	A 20000619
			WO 2001-EP6763	W 20010614
OTHER SOURCE(S):			MARPAT 136:69729	

L14 ANSWER 9 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 IT 383381-59-7P
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (preparation of thiophene-3-carboxamides as kinase inhibitors)
 RN 383381-59-7 CAPLUS
 CN 2-Butenediamide, N-[3-(aminocarbonyl)-4,5-dimethyl-2-thienyl]-N'-phenyl- (9CI) (CA INDEX NAME)

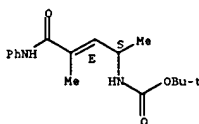


L14 ANSWER 10 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN
 AB A mild and convenient method for the preparation of amides from carboxylic acids and isocyanates is described. By using DMAP as a catalyst milder reaction conditions are realized which also allow the conversion of α -chiral isocyanates, as well as α -chiral carboxylic acids without racemization.

ACCESSION NUMBER: 2001:126010 CAPLUS
 DOCUMENT NUMBER: 134:340134
 TITLE: Condensation between isocyanates and carboxylic acids in the presence of 4(dimethylamino)pyridine (DMAP), a mild and efficient synthesis of amides
 AUTHOR(S): Schuenmacher, Anne C.; Hoffmann, R. W.
 CORPORATE SOURCE: Fachbereich Chemie, Philipps Universitat-Marburg, Marburg, 35032, Germany
 SOURCE: Synthesis (2001), (2), 243-246
 CODEN: SYNTBF; ISSN: 0039-7881
 PUBLISHER: Georg Thieme Verlag
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 134:340134
 IT 337514-53-1P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of amides by condensation of isocyanates with carboxylic acids in presence of (dimethylamino)pyridine)

RN 337514-53-1 CAPLUS
 CN Carbamic acid, [(1S,2E)-1,3-dimethyl-4-oxo-4-(phenylamino)-2-butenyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).
 Double bond geometry as shown.

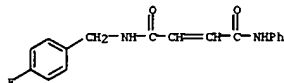


REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 11 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN

AB The rational design of a bis(phosphine oxide) host which is capable of binding a benzylic amine is presented. The ability of this host to increase the rate of addition of 4-fluorobenzylamine to N-phenylmaleimide is rationalized in terms of the enhancement of the nucleophilicity of the benzylic amine.

ACCESSION NUMBER: 2000:248591 CAPLUS
DOCUMENT NUMBER: 132:347271
TITLE: Using Polarization Effects to Alter Chemical Reactivity: A Simple Host Which Enhances Amine Nucleophilicity
AUTHOR(S): Ashton, Peter R.; Calcagno, Patrizia; Spencer, Neil; Harris, Kenneth D. M.; Philp, Douglas
CORPORATE SOURCE: School of Chemistry, University of Birmingham, Edgbaston Birmingham, B15 2TT, UK
SOURCE: Organic Letters (2000), 2(10), 1365-1368
CODEN: ORLEF7; ISSN: 1523-7060
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
IT 268739-00-0
RL: PMU (Formation, unclassified); FORM (Formation, nonpreparative) (H-bonding-induced polarization effects of bis(phosphine oxide) host on primary amines resulting in enhanced nucleophilicity)
RN 268739-00-0 CAPLUS
CN 2-Butenediamide, N-[(4-fluorophenyl)methyl]-N'-phenyl- (9CI) (CA INDEX NAME)



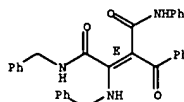
REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 12 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN

AB The reaction of 1-phenyl-4-(phenylhydroxymethylene)pyrrolidine-2,3,5-trione with difunctional bases (α -, β -, or γ -amino acid derivs. or aminoethanol) leads to a mixture of tautomeric Schiff bases and enamines. Some of the products easily undergo transamination at their enamine moiety.

ACCESSION NUMBER: 1999:286529 CAPLUS
DOCUMENT NUMBER: 131:58717
TITLE: Synthesis and transamination of enamines. Derivatives of 1-phenyl-4-(phenylhydroxymethylene)pyrrolidine-2,3,5-trione
AUTHOR(S): Ostrowska, Katarzyna; Ciechanowicz-Rutkowska, Maryla; Pilati, Tullio; Zuchowski, Grzegorz
CORPORATE SOURCE: Department Organic Chemistry, Jagiellonian University, Krakow, 30060, Pol.
SOURCE: Monatshefte fuer Chemie (1999), 130(4), 555-562
CODEN: MOCHB7; ISSN: 0026-9247
PUBLISHER: Springer-Verlag Wien
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 131:58717
IT 227766-04-3P
RL: SPN (Synthetic preparation); PREP (Preparation) (preparation and transamination of (hydroxymethylene)pyrrolidinetriene-derived enamines)
RN 227766-04-3 CAPLUS
CN 2-Butenediamide, 2-benzoyl-N1-phenyl-N4-(phenylmethyl)-3-[(phenylmethyl)amino]-, (2Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



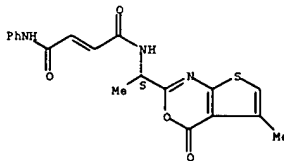
REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 13 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN

AB Enedione derivs. of thieno[2,3-d]oxazinones are nanomolar inhibitors of CMV protease which act through a novel dual acylation of the catalytic serine and alkylation of the protease cysteine 161 via a Michael addition to the enedione moiety of the inhibitor.

ACCESSION NUMBER: 1999:170595 CAPLUS
DOCUMENT NUMBER: 130:320415
TITLE: Inhibition of human cytomegalovirus protease by enedione derivatives of thieno[2,3-d]oxazinones through a novel dual acylation/alkylation mechanism
AUTHOR(S): Pinto, Ivan L.; Jarvest, Richard L.; Clarke, Brian; Dabrowski, Christine E.; Fenwick, Ashley; Gorczyca, Michele M.; Jennings, L. John; Lavery, Patrick; Sternberg, Edmund J.; Tew, David G.; West, Andrew
CORPORATE SOURCE: SmithKline Beecham Pharmaceuticals, New Frontiers Science Park, Essex, CM19 5AW, UK
SOURCE: Bioorganic & Medicinal Chemistry Letters (1999), 9(3), 449-452
CODEN: BMCLE8; ISSN: 0960-894X
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
IT 223921-72-0P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation) (inhibition of human cytomegalovirus protease by enedione derivs. of thieno[2,3-d]oxazinones through a novel dual acylation/alkylation mechanism)
RN 223921-72-0 CAPLUS
CN 2-Butenediamide, N-[(1S)-1-(5-methyl-4-oxo-4H-thieno[2,3-d][1,3]oxazin-2-yl)ethyl]-N'-phenyl- (9CI) (CA INDEX NAME)

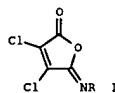
Absolute stereochemistry.
Double bond geometry unknown.



REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 14 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN

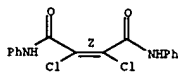
GI



AB Isoimides I [R = 1-naphthyl, (un)substituted phenyl] were prepared from dichloromaleic acid chloride and amines in the presence pyridine. The ease of thermal isoimide-imide isomerization of I (R = aryl, alkyl) decreased with increasing electron-withdrawing ability and volume of R. Reaction of I with amines gave diamides.

ACCESSION NUMBER: 1999:40938 CAPLUS
DOCUMENT NUMBER: 130:182311
TITLE: Synthesis and thermal stability of 2,3-dichloromaleic N-arylisimides and their reaction with amines
AUTHOR(S): Ganin, E. V.
CORPORATE SOURCE: Fiz. Khim. Inst. Zashchity Okruzhayushchei Sredy i Cheloveka, Odessa, Ukraine
SOURCE: Ukrainskii Khimicheskii Zhurnal (Russian Edition) (1997), 63(9-10), 39-43
CODEN: UKZHAU; ISSN: 0041-6045
PUBLISHER: Institut Obshchei i Neorganicheskoi Khimii im. V. I. Vernadskogo NAN Ukrainy
DOCUMENT TYPE: Journal
LANGUAGE: Russian
IT 79837-70-0P 220509-55-7P 220509-56-8P 220509-57-9P 220509-58-0P 220509-59-1P 220509-60-4P 220509-61-5P 220509-62-6P 220509-63-7P 220509-64-8P 220509-65-9P
RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
RN 79837-70-0 CAPLUS
CN 2-Butenediamide, 2,3-dichloro-N,N'-diphenyl-, (2Z)- (9CI) (CA INDEX NAME)

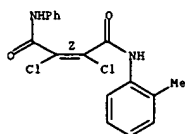
Double bond geometry as shown.



RN 220509-55-7 CAPLUS
CN 2-Butenediamide, 2,3-dichloro-N-(2-methylphenyl)-N'-phenyl-, (2Z)- (9CI) (CA INDEX NAME)

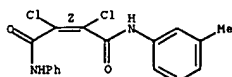
Double bond geometry as shown.

L14 ANSWER 14 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



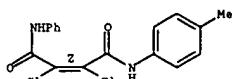
RN 220509-56-8 CAPLUS
CN 2-Butenediamide, 2,3-dichloro-N-(3-methylphenyl)-N'-phenyl-, (2Z)- (9CI)
(CA INDEX NAME)

Double bond geometry as shown.



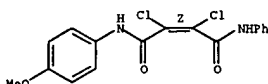
RN 220509-57-9 CAPLUS
CN 2-Butenediamide, 2,3-dichloro-N-(4-methylphenyl)-N'-phenyl-, (2Z)- (9CI)
(CA INDEX NAME)

Double bond geometry as shown.



RN 220509-58-0 CAPLUS
CN 2-Butenediamide, 2,3-dichloro-N-(4-methoxyphenyl)-N'-phenyl-, (2Z)- (9CI)
(CA INDEX NAME)

Double bond geometry as shown.



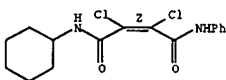
RN 220509-59-1 CAPLUS
CN 2-Butenediamide, 2,3-dichloro-N-phenyl-N'-propyl-, (2Z)- (9CI)
(CA INDEX NAME)

Double bond geometry as shown.

L14 ANSWER 14 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

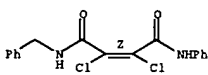
RN 220509-64-8 CAPLUS
CN 2-Butenediamide, 2,3-dichloro-N-cyclohexyl-N'-phenyl-, (2Z)- (9CI)
(CA INDEX NAME)

Double bond geometry as shown.

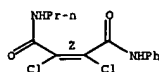


RN 220509-65-9 CAPLUS
CN 2-Butenediamide, 2,3-dichloro-N-phenyl-N'-(phenylmethyl)-, (2Z)- (9CI)
(CA INDEX NAME)

Double bond geometry as shown.

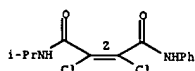


L14 ANSWER 14 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



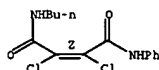
RN 220509-60-4 CAPLUS
CN 2-Butenediamide, 2,3-dichloro-N-(1-methylethyl)-N'-phenyl-, (2Z)- (9CI)
(CA INDEX NAME)

Double bond geometry as shown.



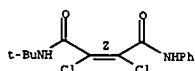
RN 220509-61-5 CAPLUS
CN 2-Butenediamide, N-butyl-2,3-dichloro-N'-phenyl-, (2Z)- (9CI)
(CA INDEX NAME)

Double bond geometry as shown.



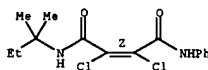
RN 220509-62-6 CAPLUS
CN 2-Butenediamide, 2,3-dichloro-N-(1,1-dimethylethyl)-N'-phenyl-, (2Z)- (9CI)
(CA INDEX NAME)

Double bond geometry as shown.



RN 220509-63-7 CAPLUS
CN 2-Butenediamide, 2,3-dichloro-N-(1,1-dimethylpropyl)-N'-phenyl-, (2Z)- (9CI)
(CA INDEX NAME)

Double bond geometry as shown.



L14 ANSWER 15 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN

AB The structure-based design, chemical synthesis, and biol. evaluation of peptide-derived human rhinovirus (HRV) 3C protease (3CP) inhibitors are described. These compds. incorporate various Michael acceptor moieties and are shown to irreversibly bind to HRV serotype 14 3CP with inhibition activities (kobs/[I]) ranging from 100 to 600 000 M-1 s-1. These inhibitors are also shown to exhibit antiviral activity when tested against HRV-14-infected H1-HeLa cells with EC50's approaching 0.50 μM. Extensive structure-activity relationships developed by Michael acceptor alteration are reported along with the evaluation of several compds. against HRV serotypes other than 14. A 2.0 Å crystal structure of a peptide-derived inhibitor complexed with HRV-2 3CP is also detailed.

ACCESSION NUMBER: 1998:447012 CAPLUS

DOCUMENT NUMBER: 129:189656

TITLE: Structure-Based Design, Synthesis, and Biological Evaluation of Irreversible Human Rhinovirus 3C Protease Inhibitors. 1. Michael Acceptor Structure-Activity Studies

AUTHOR(S): Dragovich, Peter S.; Webber, Stephen E.; Babine, Robert E.; Fuhrman, Sheila A.; Patick, Amy K.; Matthews, David A.; Lee, Caroline A.; Reich, Siegfried H.; Prins, Thomas J.; Marakovits, Joseph T.; Littlefield, Ethel S.; Zhou, Ru; Tikhe, Jayashree; Ford, Clifford E.; Wallace, Michael B.; Meador, James W., III; Ferre, Rose Ann; Brown, Edward L.; Binford, Susan L.; Harr, James E. V.; Delisle, Dorothy M.; Worland, Stephen T.

CORPORATE SOURCE: Agouron Pharmaceuticals Inc., San Diego, CA, 92121, USA

SOURCE: Journal of Medicinal Chemistry (1998), 41(15), 2806-2818

CODEN: JMCHAR; ISSN: 0022-2623

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

IT 199904-21-2P

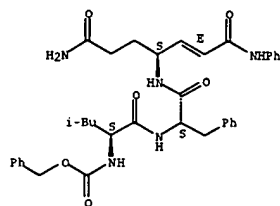
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation) (structure-based design, synthesis, and biol. evaluation of irreversible human rhinovirus 3C protease inhibitors which incorporate Michael acceptor moieties)

RN 199904-21-2 CAPLUS

CN L-Phenylalaninamide, N-[(phenylmethoxy)carbonyl]-L-leucyl-N-[(1S,2E)-1-(3-amino-3-oxopropyl)-4-oxo-4-(phenylamino)-2-butenyl]- (9CI)
(CA INDEX NAME)

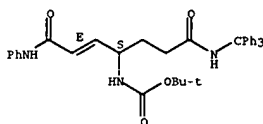
Absolute stereochemistry.

Double bond geometry as shown.



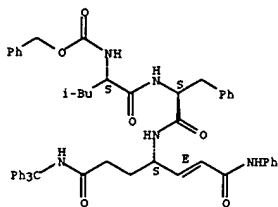
IT 211869-44-2P 211869-45-3P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (structure-based design, synthesis, and biol. evaluation of irreversible human rhinovirus 3C protease inhibitors which incorporate Michael acceptor moieties)
 RN 211869-44-2 CAPLUS
 CN Carbamic acid, [(1S,2E)-4-oxo-1-[3-oxo-3-[(triphenylmethyl)amino]propyl]-4-(phenylamino)-2-butenyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as shown.

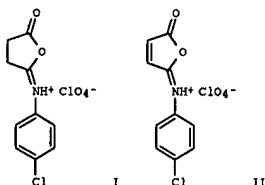


RN 211869-45-3 CAPLUS
 CN L-Phenylalaninamide, N-[(phenylmethoxy)carbonyl]-L-leucyl-N-[(1S,2E)-4-oxo-1-[3-oxo-3-[(triphenylmethyl)amino]propyl]-4-(phenylamino)-2-butenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as shown.



REFERENCE COUNT: 75 THERE ARE 75 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

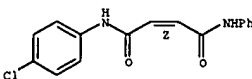


AB The ring opening reactions of the title compds., N-(oxofuranylidene)benzenaminium perchlorates (N-arylsuccinimidium perchlorates or N-arylmaleisoimidium perchlorates) I or II upon treatment with primary amines undergo a nucleophilic addition via ring-opening at the carbonyl group to give.

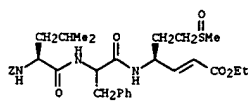
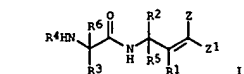
ACCESSION NUMBER: 1997:778792 CAPLUS
 DOCUMENT NUMBER: 128:75165
 TITLE: The regioselectivity of some succinimidium and maleisoimidium perchlorates towards amines and aromatic hydrocarbons under Friedel Crafts conditions
 AUTHOR(S): Sayed, Fekria S.; Derbala, H. A.; Darwish, S. I.; Mansour, M. M.; Ismail, M. F.
 CORPORATE SOURCE: Chemistry Department, Faculty of Science, Ain Shams University, Cairo, Egypt
 SOURCE: Egyptian Journal of Chemistry (1997), 40(2), 93-104
 CODEN: EGJCA3; ISSN: 0367-0422
 PUBLISHER: National Information and Documentation Centre
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 128:75165

IT 200430-21-3P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 200430-21-3 CAPLUS
 CN 2-Butenediamide, N-(4-chlorophenyl)-N'-phenyl-, (Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT



AB Picornaviral 3C protease inhibitors I [R1 = H, F, alkyl, OH, SH, O-alkyl, S-alkyl; R2, R5 = independently H, XY1A1(B1)D1, alkyl group different from XY1A1(B1)D1, with the proviso that both R2 and R5 = H and when R2 or R5 = XY1A1(B1)D1, X = CH or CF and Y1 = CH or CF; R3, R6 = independently H, F, alkyl; 2R4 = H, OH, suitable organic groups; Z, Z1 = independently H, F, alkyl, cycloalkyl, heterocycloalkyl, aryl, heteroaryl, etc; XY1 form 3-membered ring with Q1, Q1 = CR10R11, O, X = CH, CF, Y = CH, CF, C-alkyl; R10, R11 = independently H, halo, alkyl; CR10R11 = cycloalkyl, heterocycloalkyl; X = CH2, CF2, CHF, S; Y1 = O, S, NR12, CR12R14, CO, CS, C(CR13R14); R12 = H, alkyl; R13, R14 = independently H, F, alkyl; CR13R14 = cycloalkyl, heterocycloalkyl; A1 = C, CH, CF, S, P, Se, N, NR15, S(O), Se(O), P(OR15), P(NR15R16); R15, R16 = independently alkyl, cycloalkyl, heterocycloalkyl, aryl, heteroaryl; D1 = moiety containing electron lone pair capable of forming hydrogen bond; B1 = H, F, alkyl, cycloalkyl, heterocycloalkyl, aryl, heteroaryl, OR17, SR17, NR17R18, NR19NR17R18, NR17R18; R17-R19 = H, any group R15; with provisos], and pharmaceutically acceptable salts thereof and prodrugs thereof, obtainable by chemical synthesis, inhibit or block the biol. activity of picornaviral 3C proteases. These compds., as well as pharmaceutical compns. that contain these compds., are suitable for treating patients or hosts infected with one or more picornaviruses. Several novel methods and intermediates can be used to prepare the novel picornaviral 3C protease inhibitors of the present invention. Thus, olefination of protected peptide aldehyde 2-L-Leu-L-Phe-L-Met(O)-H (Z = PhCH2O2C), prepared in 3 steps from L-methioninol and Z-L-Leu-L-Phe-OH, with (carbethoxymethylene)triphenylphosphorane gave 74% title compound II. II and related alkene pseudopeptides were tested for inhibition of rhinovirus protease, with II showing $K_i = 4.3 \mu\text{M}$.

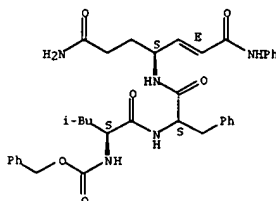
ACCESSION NUMBER: 1997:757024 CAPLUS
DOCUMENT NUMBER: 128:13442
TITLE: Preparation of alkene pseudopeptides as picornavirus 3C protease inhibitors
INVENTOR(S): Webber, Stephen E.; Dragovich, Peter S.; Prins, Thomas J.; Reich, Siegfried H.; Little, Thomas L., Jr.; Littlefield, Ethel S.; Marakovits, Joseph T.; Babine,

PATENT ASSIGNEE(S): Robert E. Blackman, Ted M.
SOURCE: Agouron Pharmaceuticals, Inc., USA
PCT Int. Appl., 222 pp.
CODEN: PIXK02
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9743305	A1	19971120	WO 1997-US8112	19970513
V: AL, AM, AT, AU, AZ, BA, BE, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LF, LG, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
US 5856530	A	19990105	US 1997-850398	19970502
CA 2254343	AA	19971120	CA 1997-2254343	19970513
AU 9730059	A1	19971205	AU 1997-30059	19970513
AU 722704	B2	20000810		
ZA 9704108	A	19980820	ZA 1997-4108	19970513
EP 910572	A1	19990428	EP 1997-924707	19970513
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2000506903	T2	20000606	JP 1997-541076	19970513
TW 574226	B	20040201	TW 1997-86106355	19970513
KR 2000011019	A	20000225	KR 1998-709169	19981113
US 6214799	B1	20010410	US 1999-226205	19991007
US 6362166	B1	20020326	US 2000-689717	20001013
PRIORITY APPLN. INFO.:				
US 1996-176662 P 19960514				
US 1996-645687 A 19960514				
US 1997-850398 A 19970502				
WO 1997-US8112 W 19970513				
US 1999-226205 A3 19990107				

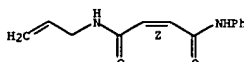
OTHER SOURCE(S): MARPAT 128:13442
IT 199004-21-2P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of alkene pseudopeptides as picornavirus 3C protease inhibitors)
RN 199004-21-2 CAPLUS
CN L-Phenylalaninamide, N-[(phenylmethoxy)carbonyl]-L-leucyl-N-[(1S,2E)-1-(3-amino-3-oxopropyl)-4-oxo-4-(phenylamino)-2-butenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



AB A series of 3,3'-bismaleimiddiphenylsulfone/allylamine (3,3'-BDS/A) adducts were prepared by reacting 3,3'-BDS with various molar percentages of allylamine (A). The reaction path, revealed by a model compound study of N-phenylmaleimide reacting with allylamine, indicates that the imido ring of 3,3'-BDS was opened by allylamine resulting in the formation of two amido groups. The IR and mass spectra of curing 3,3'-BDS/A adducts indicate that the allylamine groups cleaved with the recovery of imido ring of 3,3'-BDS and then participated in the cure reactions. The cure reaction paths depend on the amount of allylamine groups in the 3,3'-BDS/A adducts. When it is in a small amount, the cleaved allylamines will accelerate the homopolymerization of 3,3'-BDS through the maleimide double bonds. When allylamine groups are plentiful, the cleaved allylamines might polymerize by themselves through the allyl groups. A decomposition mechanism

of 3,3'-BDS/A adducts was suggested by mass spectra.
ACCESSION NUMBER: 1997:506646 CAPLUS
DOCUMENT NUMBER: 127:191098
TITLE: Synthesis, curing, and decomposition of allylamine-adducted 3,3'-bismaleimiddiphenylsulfone resins
AUTHOR(S): Lin, King-Fu; Lin, Jin-Sing; Cheng, Chen-Hwa
CORPORATE SOURCE: Institute Materials Science Eng., National Taiwan University, Taipei, 10617, Taiwan
SOURCE: Journal of Polymer Science, Part A: Polymer Chemistry (1997), 35(12), 2469-2478
CODEN: JPACED; ISSN: 0887-624X
PUBLISHER: Wiley
DOCUMENT TYPE: Journal
LANGUAGE: English
IT 194359-71-2P
RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (model compound; preparation and cure and decomposition mechanisms of allylamine adducts of bismaleimiddiphenyl sulfone)
RN 194359-71-2 CAPLUS
CN 2-Butenediamide, N-phenyl-N'-2-propenyl-, (Z)- (9CI) (CA INDEX NAME)
Double bond geometry as shown.



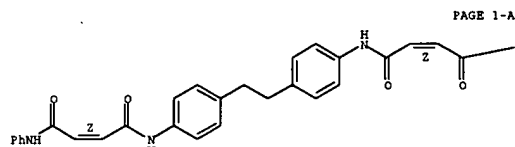
L14 ANSWER 19 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN
 AB Polymaleamides have been synthesized by the ring-opening polyaddn. of N,N'-ethylenedianilinoisomaleimide (EBIMI) with the aromatic diamines, 4,4'-diaminodiphenylmethane, 4,4'-diaminobiphenyl, 4,4'-diaminodiphenyl sulfone, 1,5-diaminonaphthalene, and 2,6-diaminopyridine in 1-methyl-2-pyrrolidione. The appropriate model compound was also prepared. The structures of EBIMI, the model compound, and the polymaleamides were confirmed by IR, UV-visible, 1H NMR spectra, and elemental analyses. The IR spectra revealed the retention of cis-geometry about the C=C bonds in EBIMI and in the polymaleamides. The polymers were characterized by inherent viscosity, solubility, thermal stability, and DSC measurements.

The polymaleamides were found to have inherent viscosities in the 0.06-0.13 dL/g range. The polymers were completely soluble in concentrated sulfuric acid and were found to be insol. in organic solvents such as Et alc. and acetone.

The thermal degradation behaviors of the polymaleamides were studied by mass spectrometry; proposed fragmentation schemes for the polymaleamides are discussed.

ACCESSION NUMBER: 1997:396315 CAPLUS
 DOCUMENT NUMBER: 127:122065
 TITLE: New polymaleamides from N,N'-ethylenedianilinoisomaleimide and aromatic diamines by ring-opening polyaddition: synthesis and characterization
 AUTHOR(S): Nagarajan, E. R.; Rajeswari, N.; Viswanathan, S.
 CORPORATE SOURCE: Department of Printing Technology, Anna University, Madras, 600 025, India
 SOURCE: Journal of Macromolecular Science, Pure and Applied Chemistry (1997), A34(6), 1055-1076
 CODEN: JSPCE6; ISSN: 1060-1325
 PUBLISHER: Dekker
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 IT 174097-26-8P
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (model compounds; in preparation of polymaleamides from N,N'-ethylenedianilinoisomaleimide and aromatic diamines by ring-opening polyaddn.)
 RN 174097-26-8 CAPLUS
 CN 2-Butenediamide, N,N'-(1,2-ethanediyl-di-4,1-phenylene)bis[N'-phenyl-, (Z,Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



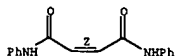
L14 ANSWER 20 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN
 AB A melt processable high nitrile multipolymer such as an acrylonitrile multipolymer is stabilized against thermal degradation and discoloration by admixing with maleic acid and its derivs., maleic anhydride, maleamides (and their salts), maleates (and their salts), and combinations thereof.

ACCESSION NUMBER: 1997:286222 CAPLUS
 DOCUMENT NUMBER: 126:264810
 TITLE: Stabilizers for high nitrile multipolymers
 INVENTOR(S): Ball, Lawrence E.; Wu, Muyen; Wardlow, Eddie, Jr.
 PATENT ASSIGNEE(S): Standard Oil Company, USA
 SOURCE: Can. Pat. Appl., 30 pp.
 CODEN: CPXKXB
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CA 2177798	AA	19961227	CA 1996-2177798	19960530
AU 9656111	A1	19970109	AU 1996-56111	19960621
AU 704148	B2	19990415		
PRIORITY APPLN. INFO.:			US 1995-494833	A 19950626
			US 1996-649153	A 19960517

OTHER SOURCE(S): MARPAT 126:264810
 IT 59411-44-8 Diphenylmaleimide
 RL: MOA (Modifier or additive use); USES (Uses) (maleic acid derivative stabilizers for prevention of thermal degradation and discoloration of high nitrile multipolymers)
 RN 59411-44-8 CAPLUS
 CN 2-Butenediamide, N,N'-diphenyl-, (Z,Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



L14 ANSWER 19 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 PAGE 1-B

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REFERENCE COUNT: 48 THERE ARE 48 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 21 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN
 GI

AB The title compds. [I; one of R1 and R2 = R5 and the other = CH(R6)-alk-R7, alk-CH(R6)R7, etc. (wherein R5 = R3, R4; R6 = unsubstituted or lower alkylated and/or lower alkanoylated amino; R7 = H, an aliphatic, cycloaliph., heterocycloaliph. radical, etc.); R3, R4 = H, lower alkyl, halo, etc.], useful in the preparation of a medicament for the treatment of pathol. conditions that are responsive to blocking of AMPA, kainate and/or glycine binding sites of the NMDA receptor, were prepared and formulated. Thus, reaction of 7-bromo-5-bromomethyl-2,3-dimethoxyquinoxaline with glycine tert-Bu ester hydrochloride in the presence of Et3N in MeCN followed by deesterification afforded the title compound II.HBr. Compds. I are effective at 10-500 mg/day when administered orally to 75 kg patient.

ACCESSION NUMBER: 1997:278950 CAPLUS
 DOCUMENT NUMBER: 126:251169
 TITLE: Preparation of novel 2,3-dioxo-1,2,3,4-tetrahydroquinoxaliny derivatives as AMPA, kainate and/or glycine binding sites of the NMDA receptor ligands
 INVENTOR(S): Acklin, Pierre; Allgeier, Hans; Auberson, Yves; Biollaz, Michel; Moretti, Robert; Ofner, Silvio; Veenstra, Siem Jacob
 PATENT ASSIGNEE(S): Novartis Ag, Switz.; Acklin, Pierre; Allgeier, Hans; Auberson, Yves; Biollaz, Michel; Moretti, Robert; Ofner, Silvio; Veenstra, Siem Jacob
 SOURCE: PCT Int. Appl., 157 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9708155	A1	19970306	WO 1996-EP3644	19960819
W: AL, AU, BB, BG, CA, CN, CU, CZ, EE, GE, HU, IL, IS, JP, KP, KR, LX, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, TR, TT, UA, US, UZ, VN, AM, AZ, BY, EG, KZ, MD, RU, TJ, TH				
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, EF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
CA 2227851	AA	19970306	CA 1996-2227851	19960819
AU 9668742	A1	19970319	AU 1996-68742	19960819
AU 705871	B2	19990603		
EP 853617	A1	19980722	EP 1996-929275	19960819
EP 853617	B1	20040303		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE,				

L14 ANSWER 21 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

SI, FI
CN 1193968 A 19980923 CN 1996-196581 19960819
JP 1151444 T2 19991005 JP 1997-509801 19960819
JP 3159711 B2 20010423
IL 122987 A1 20010808 IL 1996-122987 19960819
AT 260902 E 20040315 AT 1996-929275 19960819
PT 853617 T 20040630 PT 1996-929275 19960819
ES 2217324 T3 20041101 ES 1996-929275 19960819
TW 438782 B 20010607 TW 1996-85110230 19960822
ZA 9607322 A 19970228 ZA 1996-7322 19960829
NO 9800814 A 19980421 NO 1998-814 19980226
NO 310236 B1 20010611
US 6080743 A 20000627 US 1998-29525 19980227
HK 1010196 A1 20050121 HK 1998-111287 19981016
CH 1995-2479 A 19950831
CH 1995-2734 A 19950927
CH 1995-2747 A 19950928
CH 1996-1213 A 19960510
CH 1996-1630 A 19960628
CH 1996-1214 A 19960510
WO 1996-EP3644 W 19960819

PRIORITY APPLN. INFO.: OTHER SOURCE(S): MARPAT 126:251169

IT 186693-34-7P

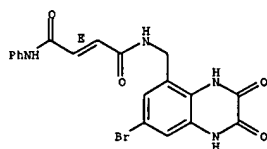
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of novel 2,3-dioxo-1,2,3,4-tetrahydro-quinoxaliny derivs.

as AMPA, kainate and/or glycine binding sites of the NMDA receptor ligands)

RN 186693-34-7 CAPLUS

CN 2-Butenediamide, N-[(7-bromo-1,2,3,4-tetrahydro-2,3-dioxo-5-quinoxaliny)methyl]-N'-phenyl-, (E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



L14 ANSWER 23 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN

AB Polymaleimides from bisoxaleimides and diamines were prepared by ring-opening polyaddn. (ROPA). These polymaleimides were found to have inherent viscosity in the range 0.30-0.42 g dl-1. The identities of the polymaleimides were confirmed by elemental anal., and IR, UV-visible and 1H NMR spectroscopies. The thermal degradation behavior of the polymaleimides

was studied by mass spectrometry and thermogravimetric anal.; fragmentation schemes for the polymaleimides are proposed.

ACCESSION NUMBER: 1997:171737 CAPLUS

DOCUMENT NUMBER: 126:171999

TITLE: Synthesis and characterization of new polymaleimides from N,N'-bisoxaleimide and N,N'-methylene dianilino bisoxaleimide with some aromatic diamines by ring-opening polyaddition

AUTHOR(S): Viswanathan, S.; Nagarathinam, R.; Rajeswari, N.
CORPORATE SOURCE: Dep. Polymer Science, Univ. Madras, Madras, 600 025, India

SOURCE: Polymer (1997), 38(1), 217-224

CODEN: POLMAG; ISSN: 0032-3861

PUBLISHER: Elsevier

DOCUMENT TYPE: Journal

LANGUAGE: English

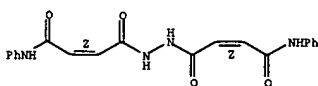
IT 57018-29-8P 118694-36-3P

RL: NUU (Other use, unclassified); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
(model compound; preparation of bisoxaleimide monomers for ring-opening polyaddn.)

RN 57018-29-8 CAPLUS

CN 2-Butenoic acid, 4-oxo-4-(phenylamino)-, 2-[1,4-dioxo-4-(phenylamino)-2-butenyl]hydrazide, (Z,Z)- (9CI) (CA INDEX NAME)

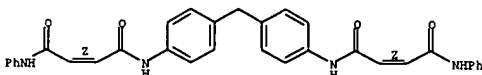
Double bond geometry as shown.



RN 118694-36-3 CAPLUS

CN 2-Butenediamide, N,N'-[(methylene-4,1-phenylene)bis(N'-phenyl-, (Z,Z)- (9CI) (CA INDEX NAME)]

Double bond geometry as shown.



REFERENCE COUNT: 37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 22 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN

AB A melt processable high nitrile multipolymer, such as acrylonitrile-olefinically unsatd. multipolymer, is stabilized by admixing with a maleic acid or its derivs., maleimides, maleic anhydride, maleates or combinations thereof. Thus, acrylonitrile-methacrylonitrile copolymer containing maleic acid (24) was extruded showing torque (200') 2611, 2842, and 3058, at 10, 20, and 30 min; vs. 2632, 2739, and 3494, resp., without maleic acid.

ACCESSION NUMBER: 1997:130003 CAPLUS

DOCUMENT NUMBER: 126:132212

TITLE: Heat stabilizers for high nitrile multipolymers

INVENTOR(S): Ball, Lawrence; Wardlow, Eddie; Wu, Muyen

PATENT ASSIGNEE(S): The Standard Oil Company, USA

SOURCE: Eur. Pat. Appl., 13 pp.

CODEN: EPXDXW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 751177	A2	19970102	EP 1996-304603	19960520
EP 751177	A3	19971229		
EP 751177	B1	20020828		
R: CH, DE, ES, FR, GB, IT, IL, SE				
ZA 9604488	A	19970113	ZA 1996-4488	19960531
SG 96160	A1	20030523	SG 1996-10016	19960607
CN 1161354	A	19971008	CN 1996-106936	19960622
TW 430684	B	20010421	TW 1996-85107683	19960626
PRIORITY APPLN. INFO.: OTHER SOURCE(S): MARPAT 126:132212			US 1995-494833	A 19950626

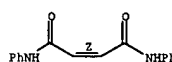
IT 59411-44-8

RL: MOA (Modifier or additive use); PRP (Properties); USES (Uses)
(heat stabilizers for high nitrile multipolymers)

RN 59411-44-8 CAPLUS

CN 2-Butenediamide, N,N'-diphenyl-, (2Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



L14 ANSWER 24 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN

AB Synthesis, curing, and phys./mech. properties of 4,4'-bismaleimiddiphenylmethane (BDM), 4,4'-bismaleimiddiphenyl ether (BDE), 3,3'-bismaleimiddiphenyl sulfone (3-BDS), and 4,4'-bismaleimiddiphenyl sulfone (4-BDS) adducted with various amount of allylamine were investigated and compared with each other. BDM was reacted with allylamine exclusively through the Michael addition reaction, whereas 3-BDS and 4-BDS were reacted with allylamine by amidation along with the cleavage of an imide-ring C-N bond. Only BDE underwent both reactions to yield BDE/allylamine adducts. Three types of curing reactions might occur depending on the amount of adducted allylamine: (1) thermal homopolymn. through the maleimide double bonds; (2) accelerated homopolymn. by allylamine; and (3) polymerization of the cleaved allylamine by themselves or with the maleimido groups. Of all the BMIs/allylamine adducts under study, the cured BDM/50 mol% allylamine (I) and BDE/50 mol% I adducts have superior mech. properties. In addition, the former resin has Tg 335° and a degradation temperature (Td) 471°, whereas the latter has a Tg of 349° and a Td of 436°.

ACCESSION NUMBER: 1996:661390 CAPLUS

DOCUMENT NUMBER: 125:302104

TITLE: High temperature resins based on allylamine/bismaleimides

AUTHOR(S): Lin, King-Fu; Lin, Jin-Sing; Cheng, Chen-Hwa

CORPORATE SOURCE: Inst. of Materials Science and Engineering, National Taiwan Univ., Taipei, 10617, Taiwan

SOURCE: Polymer (1996), 37(21), 4729-4737

CODEN: POLMAG; ISSN: 0032-3861

PUBLISHER: Elsevier

DOCUMENT TYPE: Journal

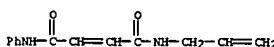
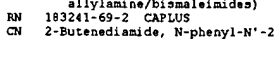
LANGUAGE: English

IT 183241-69-2P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(synthesis and properties of model compound to high-temperature resins based on allylamine/bismaleimides)

RN 183241-69-2 CAPLUS

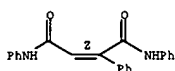
CN 2-Butenediamide, N-phenyl-N'-2-propenyl-, (9CI) (CA INDEX NAME)



L14 ANSWER 25 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN
 AB 2-1,2-Bis(trimethylstannyl)-1-alkenes show different types of reaction behavior towards various electrophiles. P-Tolylsulfonyl isocyanate forms five-membered tin-nitrogen-containing heterocycles. 1,1-Dichloromethyl Me ether reacts with carbonylfunctionalized distannylalkenes to yield α,β -unsatd. aldehydes, which are useful tools for the synthesis of further substituted vinylstannanes. 2-1,2-Bis(trimethylstannyl)-1-alkenes containing heteroatoms such as O or N undergo only protodestannylation with this electrophile. The reaction of 2-1,2-bis(trimethylstannyl)-1-alkenes with trimethylsilyl chlorosulfonate followed by hydrolysis with aqueous NaHCO₃ provides the corresponding sodium sulfonates. SO₂ and SO₃ undergo insertion into both tin-carbon bonds in an ipso- and stereospecific manner to form bis-sulfinic- or bis-sulfonic bis(trimethylstannyl) esters.

ACCESSION NUMBER: 1996:360170 CAPLUS
 DOCUMENT NUMBER: 125:168187
 TITLE: Tin for organic synthesis. Part 15. The use of 1,2-bis(trimethylstannyl)-1-alkenes in electrophilic destannylation reactions
 AUTHOR(S): Niestroj, Michael; Neumann, Wilhelm P.; Mitchell, Terence N.
 CORPORATE SOURCE: Fachbereich Chemie, Universitaet Dortmund, Dortmund, D-44221, Germany
 SOURCE: Journal of Organometallic Chemistry (1996), 519(1-2), 45-68
 CODEN: JORCAI; ISSN: 0022-328X
 PUBLISHER: Elsevier
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 125:168187
 IT 180070-91-1P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 RN 180070-91-1 CAPLUS
 CN 2-Butenediamide, N,N''-2-triphenyl-, (2Z)- (9CI) (CA INDEX NAME)

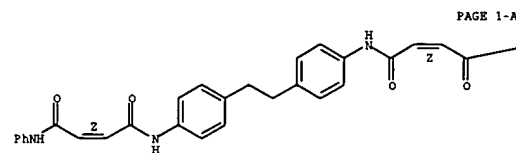
Double bond geometry as shown.



L14 ANSWER 26 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN
 AB Five polymaleamides were synthesized by the ring-opening polyaddn. of N,N'-ethanedianilinebisoxaleimide (EBIMI) with aromatic diamines (having Me or methoxy ring substituents) at room temperature; EBIMI was synthesized from N,N'-ethanedianilinebisoxaleimide. IR, ¹³C NMR, and UV-visible spectroscopies, inherent viscosity measurements, thermogravimetry, differential scanning calorimetry and mass spectrometry were used to characterize these polymers.

ACCESSION NUMBER: 1996:120007 CAPLUS
 DOCUMENT NUMBER: 124:177114
 TITLE: Synthesis and characterization of new polymaleamides from N,N'-ethanedianilinebisoxaleimide with some aromatic diamines
 AUTHOR(S): Nagarajan, E. R.; Rajeswari, N.; Nagarathinam, R.; Viswanathan, S.; Ramakrishnan, V. T.
 CORPORATE SOURCE: Department of Printing Technology, Anna University, Madras, 600 025, India
 SOURCE: Polymer International (1996), 39(2), 141-52
 CODEN: POLYIE; ISSN: 0959-8103
 PUBLISHER: Wiley
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 IT 174097-26-8P
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
 RN 174097-26-8 CAPLUS
 CN 2-Butenediamide, N,N''-(1,2-ethanediyldi-4,1-phenylene)bis[N'-phenyl-, (Z,Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



PAGE 1-A

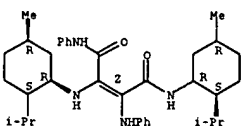
PAGE 1-B

— NHPH

L14 ANSWER 27 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN
 AB The reaction of dichloromaleimides with optically active amines affords chiral pyrrolidine-2,5-diones. The diamines are ¹³C-NMR-spectroscopically characterized. In addition, the mol. structure of 1-(R)-menthyl-3-(R)-menthylamino-4-phenylamino-pyrrolidine-2,5-dione has been determined by x-ray crystallog. The pyrrolidine-2,5-diones have been applied as planar, chiral N,N-ligands to modify the [Rh(COD)Cl]₂ catalyst in the asym. hydrosilylation reaction of acetophenone. However, the optical induction observed for this reaction are poor for N,N-ligands as compared to the corresponding P,P-ligands.

ACCESSION NUMBER: 1995:232526 CAPLUS
 DOCUMENT NUMBER: 122:160745
 TITLE: Asymmetric catalysis. IV. Hydrosilylation of acetophenone with pyrrolidine-2,5-dione modified [Rh(COD)Cl]₂ catalyst
 AUTHOR(S): Tillack, Annegret; Michalik, Manfred; Fenske, Dieter; Goessmann, Helmut
 CORPORATE SOURCE: Max-Planck-Gesellschaft, Arbeitsgruppe Komplexkatalyse an der Universitaet Rostock, Buchbinderstr. 5-6, Rostock, D-18055, Germany
 SOURCE: Journal of Organometallic Chemistry (1994), 482(1-2), 85-91
 CODEN: JORCAI; ISSN: 0022-328X
 PUBLISHER: Elsevier
 DOCUMENT TYPE: Journal
 LANGUAGE: German
 OTHER SOURCE(S): CASREACT 122:160745
 IT 161288-51-3P
 RL: CAT (Catalyst use); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
 RN 161288-51-3 CAPLUS
 CN 2-Butenediamide, N4-[5-methyl-2-(1-methylethyl)cyclohexyl]-2-[[5-methyl-2-(1-methylethyl)cyclohexyl]amino]-N1-phenyl-3-(phenylamino)-, [1R-[1c[2(1R*,2S*,5R*)],2p,5a]]- (9CI) (CA INDEX NAME)

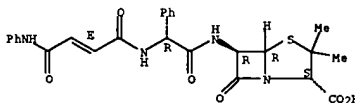
Absolute stereochemistry.
 Double bond geometry as shown.



L14 ANSWER 28 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN
 AB Ureido, oxamoyl, fumaramoyl and terephthalamoyl derivs. of ampicillin or amoxicillin were synthesized by reaction of (acyl)penicillin with (dihydroxy)arylamines or (diacyloxy)arylamines. Corresponding compds. derived from 3,4-diacetoxyaniline showed significant increase of activity against pseudomonas and salmonella in contrast to derivs. without catechol substituents. No increase of activity was observed by corresponding derivs. of bi- and tricyclic amines. Derivs. with oxamoyl, fumaramoyl or terephthalamoyl groups were found to be more active than the corresponding ureido derivs. Studies with mutants possessing higher membrane permeability have shown that the high activities of catechol containing derivs. are connected with the improved penetration through the outer membrane. Some new penicillin derivs. are more stable against β -lactamases compared with azlocillin.

ACCESSION NUMBER: 1995:51752 CAPLUS
 DOCUMENT NUMBER: 122:55762
 TITLE: Synthesis and antibacterial activity of new ureido and dicarboxylic acid diamide derivatives of acylpenicillins with and without catechol substituents
 AUTHOR(S): Heinisch, L.; Moellmann, U.; Tresselt, D.; Willitzer, H.
 CORPORATE SOURCE: Hans-Knoell-Institute Naturstoff-Forschung, Jena, Germany
 SOURCE: Arzneimittel-Forschung (1994), 44(3), 349-54
 CODEN: ARZNAD; ISSN: 0004-4172
 DOCUMENT TYPE: Journal
 LANGUAGE: German
 IT 159788-54-2P
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 RN 159788-54-2 CAPLUS
 CN 4-Thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid, 6-[[[1,4-dioxo-4-(phenylamino)-2-butenyl]amino]phenylacetyl]amino]-3,3-dimethyl-7-oxo-, [2S-[2c,5c,6p[5*(E)]]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as shown.



L14 ANSWER 29 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN
 AB In the title developers comprising a disperse medium, a coloring agent particles, a resin, and a charge-providing agent, the coloring agent particles are surface-treated with an acrylic monomer having an isocyanate group with which a resin component is copolymerized. The developers show improved charging properties and provide high quality images with good resolution and fixability. Thus, 3,3'-dichlorobenzidine(dic) was treated with methacryloyloxyethyl isocyanate and then copolymerized with methyl acrylate, styryl acrylate, and methoxytetraethylene glycol methacrylate. The reactant was mixed with Isopar, Zr octylate, and Ca octylate to give a developer.

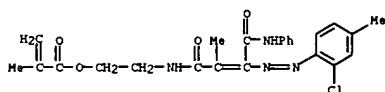
ACCESSION NUMBER: 1992:72285 CAPLUS
 DOCUMENT NUMBER: 116:72285
 TITLE: Wet developers for electrostatic latent image development using coloring agent containing resin on its surface
 INVENTOR(S): Ata, Masafumi; Watanabe, Haruo; Kawakado, Koichi
 PATENT ASSIGNEE(S): Sony Corp., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.
 CODEN: JKOCAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 03196156	A2	19910827	JP 1989-337517	19891226
JP 1989-337517			JP 1989-337517	19891226

PRIORITY APPLN. INFO.:
 IT 138476-16-1
 RL: USES (Uses)
 (electrostat. wet developer using)
 RN 138476-16-1 CAPLUS
 CN 2-Propenoic acid, 2-methyl-, 2-[[3-[(2-chloro-4-methylphenyl)azo]-2-methyl-1,4-dioxo-4-(phenylamino)-2-butenyl]amino]ethyl ester, polymer with methyl 2-propenoate, octadecyl 2-methyl-2-propenoate and 3,6,9,12-tetraoxatridec-1-yl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

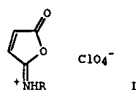
CRN 138476-15-0
 CMF C24 H25 C1 N4 O4



CM 2

CRN 57454-26-9
 CMF C13 H24 O6

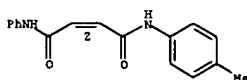
L14 ANSWER 30 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN
 GI



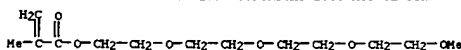
AB N-Arylmalesoimidium perchlorates I (R = Ph, 4-C6H4Me) were prepared by the action of acetic anhydride and perchloric acid on cis-RNHCOCH:CHCO2H. I (R = C6H4Me-4) reacted with amines via ring-opening to give cis-4-MeC6H4NHCOCH:CHCONHR (R = Ph, CH2Ph, Bu), while the reaction of I (R = Ph) with secondary amines gave N-phenylmaleimide. The reaction of I (R = Ph, C6H4Me-4) with aromatic hydrocarbons in the presence of anhydrous aluminum chloride gave good yields of trans-R2COCH:CHCONHR (R as above, R2 = Ph, C6H4Me-4, C6H3Me2-3,4, C6H3Me2-2,5). The reactions of some of the latter compounds with amines and phenylhydrazine are also discussed.

ACCESSION NUMBER: 1991:558859 CAPLUS
 DOCUMENT NUMBER: 115:558859
 TITLE: Synthesis and some reactions of N-arylmaleisoimidium perchlorates. A simple one-step method for synthesis of trans-β-aryl-N-arylacrylamides
 AUTHOR(S): Ismail, Mohamed Fekry; Enayat, Ebtessam Ismail; El Bassiouny, Fakhry Abdel Aziz; Younis, Hamed Ahmed
 CORPORATE SOURCE: Fac. Sci., Ain Shams Univ., Cairo, Egypt
 SOURCE: Acta Chimica Hungarica (1991), 128(3), 365-73
 CODEN: ACHUDC; ISSN: 0231-3146
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 115:558859
 IT 135979-06-5P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 RN 135979-06-5 CAPLUS
 CN 2-Butenediamide, N-(4-methylphenyl)-N'-phenyl-, (Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

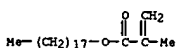


L14 ANSWER 29 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



CM 3

CRN 32360-05-7
 CMF C22 H42 O2



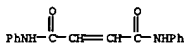
CM 4

CRN 96-33-3
 CMF C4 H6 O2



L14 ANSWER 31 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN
 AB anti head-to-head umbelliferone dimer (I) was prepared from anti head-to-head 7-acetoxycoumarin dimer. The ring-opening polyaddn. reaction of I with diamines in an aprotic polar solvent was carried out, and the properties of the resulting polyamides were investigated. I reacted successfully with aliphatic and aromatic diamines to give the corresponding high-mol.-weight polyamides. Upon photoirradn., the cyclobutanes in the main chain of the polyamides were preferentially cleaved in an asym. manner to give fumaramide (or maleamide) units. In contrast, in an alkaline solution, the cyclobutanes in the polyamide were cleaved only in a sym. manner to give low-mol.-weight products, accompanying the isomerization of the configuration of the substituents on the cyclobutanes. These reactions in alkaline medium are considered to occur through an intermediate of a quinoid enolate structure.

ACCESSION NUMBER: 1990:459902 CAPLUS
 DOCUMENT NUMBER: 113:59902
 TITLE: Synthesis and properties of polyamides having anti head-to-head umbelliferone dimer as a component
 AUTHOR(S): Saigo, Kazuhiko; Nakamura, Masataka; Suzuki, Yohko; Fang, Lan; Hasegawa, Masaki
 CORPORATE SOURCE: Fac. Eng., Univ. Tokyo, Tokyo, 113, Japan
 SOURCE: Macromolecules (1990), 23(16), 3722-9
 CODEN: MAMOBK; ISSN: 0024-9297
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 IT 77500-28-8P
 RL: FORM (Formation, nonpreparative); PREP (Preparation) (formation of, by photolysis of amine-umbelliferone dimer reaction products)
 RN 77500-28-8 CAPLUS
 CN 2-Butenediamide, N,N'-diphenyl- (9CI) (CA INDEX NAME)



L14 ANSWER 32 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN
 AB Acrylonitrile (I) solns. of maleimides, useful as materials for resins, drugs, and agrochems., are transported or stored in the presence of polymerization inhibitors and compds. with mol. weight ≥ 100 which are inert to both maleimides and I under controlling acid content $\leq 0.3\%$ (based on maleimides). Thus, 200 g mixture of N-phenylmaleimide 99.6, 2-anilino-N-phenylsuccinimide (mol. weight 226) 0.3, and N-phenylmaleamic acid (mol. weight 191) 0.1% was mixed with 100 g I and 10 mg p-MeOC₆H₄OH at 50° to give a clear yellow solution, which showed good stability by cooling to 25-30°. When a piece of carbon steel was stored in the solution at 50° for 30 days, it did not corrode and any alien substance did not appear in the solution

ACCESSION NUMBER: 1990:178659 CAPLUS
 DOCUMENT NUMBER: 112:178659
 TITLE: Transportation and storage of acrylonitrile solutions of maleimides
 INVENTOR(S): Kita, Yuichi; Kishino, Kazuo; Nakagawa, Shoichi; Sakamoto, Kentaro
 PATENT ASSIGNEE(S): Nippon Shokubai Kagaku Kogyo Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.
 CODEN: JKOXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

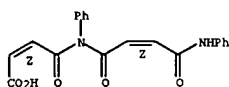
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 01250346	A2	19891005	JP 1988-203122	19880817
JP 06072133	B4	19940914		

PRIORITY APPLN. INFO.: JP 1987-329529 A1 19871228
 IT 124284-56-6

RL: RCT (Reactant); RACT (Reactant or reagent) (acrylonitrile solns. of maleimides containing, for transportation and storage)

RN 124284-56-6 CAPLUS
 CN 2-Butenoic acid, 4-[[1,4-dioxo-4-(phenylamino)-2-butenyl]phenylamino]-4-oxo-, (Z,Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



L14 ANSWER 34 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN
 AB Maleimides were transported or stored as acrylonitrile (I) solns. in the presence of inert compds. (to maleimides and I) with average mol. weight ≥ 100 . Thus, 200 g N-phenylmaleimide (II) comprising II 99.6, 2-anilino-N-phenylsuccinimide 0.3, and N-phenylmaleamic acid 0.1% was dissolved in 100 g I containing 0.5% polybutadiene (average mol. weight 2500) at 50° to give a clear yellow solution, which did not crystallize by cooling to 25°. When the solution was stirred vigorously at 25-30°, it showed good stability.

ACCESSION NUMBER: 1990:20898 CAPLUS
 DOCUMENT NUMBER: 112:20898
 TITLE: Transport and storage of acrylonitrile solution of maleimides
 INVENTOR(S): Kita, Yuichi; Kishino, Kazuo; Nakagawa, Shoichi; Sakamoto, Kentaro
 PATENT ASSIGNEE(S): Nippon Shokubai Kagaku Kogyo Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.
 CODEN: JKOXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

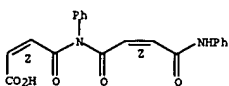
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 01156958	A2	19890620	JP 1988-203121	19880817
JP 06076374	B4	19940928		
JP 07149720	A2	19950613	JP 1994-62694	19940331
JP 2732798	B2	19980330		
JP 07149719	A2	19950613	JP 1994-62695	19940331
JP 2732799	B2	19980330		

PRIORITY APPLN. INFO.: JP 1987-217912 A1 19870902
 OTHER SOURCE(S): MARPAT 112:20898
 IT 124284-56-6

RL: RCT (Reactant); RACT (Reactant or reagent) (additive, for transport or storage of maleimides in acrylonitrile)

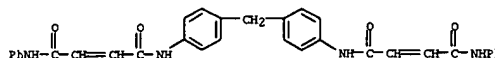
RN 124284-56-6 CAPLUS
 CN 2-Butenoic acid, 4-[[1,4-dioxo-4-(phenylamino)-2-butenyl]phenylamino]-4-oxo-, (Z,Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

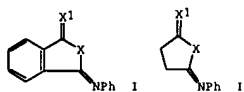


L14 ANSWER 33 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN
 AB Polymaleamides were synthesized by the ring-opening polymerization of N,N'-methanedianilinebisoxaleimide with diamines in 1-methyl-2-pyrrolidinone. The polymaleamides were characterized on the basis of elemental analyses, solubility in various solvents, inherent viscosity, IR and UV-visible spectral and thermogravimetry data.

ACCESSION NUMBER: 1990:99360 CAPLUS
 DOCUMENT NUMBER: 112:99360
 TITLE: Synthesis and characterization of some polymaleimides by ring-opening polyaddition of N,N'-methanedianilinebisoxaleimide to diamines
 AUTHOR(S): Rajeswari, N.; Viswanathan, S.; Kothandaraman, H.
 CORPORATE SOURCE: Dep. Polym. Sci., Univ. Madras, Madras, 600 025, India
 SOURCE: Indian Journal of Chemistry, Section A: Inorganic, Physical, Theoretical & Analytical (1989), 28A(11), 965-8
 CODEN: IJCADU; ISSN: 0376-4710
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 IT 106327-13-3P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of, as model compound for methanedianilinebisoxaleimide copolymers with diamines)
 RN 106327-13-3 CAPLUS
 CN 2-Butenediamide, N,N'-(methylenedi-4,1-phenylene)bis(N'-phenyl- (9CI) (CA INDEX NAME)



L14 ANSWER 35 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN
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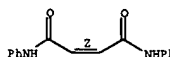
AB Ph3PBr2-promoted cyclization of disubstituted dicarboxylic acid diamides [e.g., o-(PhNHCO)2C6H4, PhNHCOCH2CH2CONHPh] in the presence of Et3N gives 72-94% of the corresponding imidic anhydrides (e.g., I, II; X = O, X1 = NPh). Treatment of these anhydrides with HCl in ClCH2CH2Cl leads to rearrangement to imino lactams (e.g., I, II; X = NPh, X1 = O).

ACCESSION NUMBER: 1990:7297 CAPLUS
 DOCUMENT NUMBER: 112:7297
 TITLE: Synthesis and rearrangement of imidic anhydrides derived from dicarboxylic acid diamides
 AUTHOR(S): Mazurkiewicz, Roman
 CORPORATE SOURCE: Inst. Org. Chem. Technol., Silesian Tech. Univ., Gliwice, 44-101, Pol.
 SOURCE: Acta Chimica Hungarica (1988), 125(6), 831-8
 CODEN: ACHUDC; ISSN: 0231-3146
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 112:7297
 IT 59411-44-8

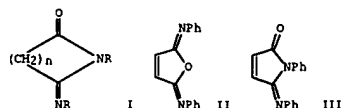
RL: RCT (Reactant); RACT (Reactant or reagent) (intramol. cyclocondensation reaction of, dibromotriphenylphosphorane-promoted)

RN 59411-44-8 CAPLUS
 CN 2-Butenediamide, N,N'-diphenyl-, (2Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



L14 ANSWER 36 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN
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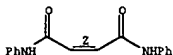


AB N,N'-Disubstituted diamides of dicarboxylic acids, e.g., RNHCO(CH₂)_nCONHR (n = 2,3, R = Me, Ph) react with Ph₃PBr₂ to form intramol. N-imidoylation products (5- or 6-iminolactams), e.g. I; only from N,N'-diphenylmaleamide the O-imidoylation product (N,N'-diphenylmaleimide anhydride II) was obtained. The imide anhydride II in CH₂Cl₂ solution in the presence of HBr undergoes a rearrangement to the iminolactam III. Possible mechanisms of these reactions are discussed. Both the ¹³C NMR and ¹H NMR spectra indicated the presence of Z,Z and Z,E-isomers in the imide anhydride.

ACCESSION NUMBER: 1989:632519 CAPLUS
DOCUMENT NUMBER: 111:232519
TITLE: Intramolecular N- and O-imidoylation of the carbonyl group
AUTHOR(S): Mazurkiewicz, Roman
CORPORATE SOURCE: Inst. Org. Chem. Technol., Silesian Polytech. Univ., Gliwice, 44101, Pol.
SOURCE: Polish Journal of Chemistry (1988), 62(1-3), 115-25
CODEN: PJCHDQ; ISSN: 0137-5083
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 111:232519
IT 59411-44-8

RL: RCT (Reactant); RACT (Reactant or reagent)
(intramol. imidoylation of)
RN 59411-44-8 CAPLUS
CN 2-Butenediamide, N,N'-diphenyl-, (2Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



L14 ANSWER 37 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN

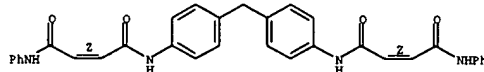
AB Ring-opening polyaddn. of N,N'-methanedianilinebisoxamaleimide to aromatic diamines in N-methyl-2-pyrrolidone at room temperature was studied. The polymers were obtained in moderate to excellent yields and characterized by IR and UV-visible spectra. The polymers were soluble in concentrated

H₂SO₄ and in amide-type solvents on heating but insol. in common organic solvents.

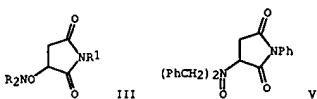
ACCESSION NUMBER: 1989:76199 CAPLUS
DOCUMENT NUMBER: 110:76199
TITLE: Synthesis of new polymaleimides by ring-opening polyaddition
AUTHOR(S): Nagarathinam, R.; Viswanathan, S.
CORPORATE SOURCE: Dep. Polym. Sci., Univ. Madras, Madras, 600025, India
SOURCE: Journal of Macromolecular Science, Chemistry (1988), A 25(12), 1675-82
CODEN: JMCHBD; ISSN: 0022-233X
DOCUMENT TYPE: Journal
LANGUAGE: English

IT 118694-36-3P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as model for bisoxamaleimide-based polyamine-polyimides)
RN 118694-36-3 CAPLUS
CN 2-Butenediamide, N,N'-(methylenedi-4,1-phenylene)bis[N'-phenyl-, (2Z)- (9CI) (CA INDEX NAME)]

Double bond geometry as shown.



L14 ANSWER 38 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN
GI

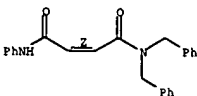


AB Addition reaction of (PhCH₂)₂NOH (I) with N-phenylmaleimide (II) in refluxing THF gave O-alkylhydroxylamine III (R = PhCH₂, R₁ = Ph) (IV) instead of the N-alkyl N-oxide V. Oxidation of 3-(dibenzylamino)-1-phenyl-2,5-pyrrolidinedione gave Cope elimination products I and II rather than V. This result suggests that IV was formed by direct O-alkylation of I without the intermediacy of V. The reaction of I and II was not inhibited by the presence of 1.1 equiv m-(O₂N)C₆H₄; an electron-transfer mechanism is probably not operative. Other III [R = PhCH₂, R₁ = H, Me, cyclohexyl, (CH₂)₁₈; R = Et, R₁ = Ph] were also prepared

ACCESSION NUMBER: 1988:630697 CAPLUS
DOCUMENT NUMBER: 109:230697
TITLE: Conjugate addition of N,N-dialkylhydroxylamines. Mechanism of O-alkylation by 1H-pyrrole-2,5-diones
AUTHOR(S): Pastor, Stephen D.; Hessel, Edward T.
CORPORATE SOURCE: Addit. Res. Dep., CIBA-GEIGY Corp., Ardsley, NY, 10502, USA
SOURCE: Journal of Organic Chemistry (1988), 53(24), 5776-9
CODEN: JOCEAH; ISSN: 0022-3263
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 109:230697
IT 117022-08-9P

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 117022-08-9 CAPLUS
CN 2-Butenediamide, N'-phenyl-N,N-bis(phenylmethyl)-, (Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



L14 ANSWER 39 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN

AB Title only translated.

ACCESSION NUMBER: 1988:38324 CAPLUS
DOCUMENT NUMBER: 108:38324
TITLE: Use of N-trialkylstannylmaleimide in the synthesis of N-substituted aspartic acid diamides
AUTHOR(S): Shcherbakov, V. I.; Stolyarova, N. E.; Rad'kova, T. V.; Razuvaev, G. A.
CORPORATE SOURCE: USSR
SOURCE: Khimiya Elementoorgan. Soed., Gor'kii (1987), (9), 28-31
From: Ref. Zh., Khim. 1987, Abstr. No. 3E144
DOCUMENT TYPE: Journal
LANGUAGE: Russian

IT 112291-06-2P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 112291-06-2 CAPLUS
CN 2-Butenediamide, N,N-dimethyl-N'-phenyl-, (Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



L14 ANSWER 40 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN

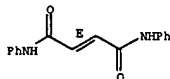
AB The title compds., useful as additives for thermoplastic resins, were prepared by condensation of HO₂CZCO₂H (Z = Cl-10 alkylene, alkenylene, arylene) with PhNH₂ at 120-200° in the presence of 5-70% solvents which may form azeotropes with water. Thus, 0.3 mol maleic acid and 1.5 mol PhNH₂ were heated in EtPh under stirring with azeotropic distillation of water and the solvent at 145-167° for 6 h to give 82.5 mol% maleic dianilide.

ACCESSION NUMBER: 1987:196057 CAPLUS
DOCUMENT NUMBER: 106:196057
TITLE: Dicarboxylic dianilides
INVENTOR(S): Inaba, Masashi; Inui, Yukioyoshi
PATENT ASSIGNEE(S): Mitsubishi Petrochemical Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.
CODEN: JKOKAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 61251649	A2	19861108	JP 1985-72273	19850405
JP 04065057	B4	19921016		

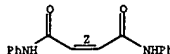
PRIORITY APPLN. INFO.:
IT 6833-07-4P, Fumaric dianilide 59411-44-8P, Maleic dianilide
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as additive for thermoplastic resins)
RN 6833-07-4 CAPLUS
CN 2-Butenediamide, N,N'-diphenyl-, (E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RN 59411-44-8 CAPLUS
CN 2-Butenediamide, N,N'-diphenyl-, (2Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



L14 ANSWER 42 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN

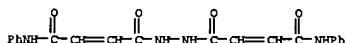
AB Some poly(maleamide hydrazides) were synthesized by the ring-opening polyaddn. reaction between N,N'-bis(isomaleimide) [6990-21-2] and diamines (piperazine, phenylenediamines, 4,4'-diaminobiphenyl, 1,5-diaminonaphthalene, and 2,6-diaminoanthraquinone) in N-methyl-2-pyrrolidone containing LiCl. Characterization of the polymers was carried

out by elemental anal., solubility in various solvents, IR, UV-visible, NMR spectra, thermogravimetry and DSC as well as by inherent viscosity measurements. These polymers began to decompose around 250°.

ACCESSION NUMBER: 1987:5508 CAPLUS
DOCUMENT NUMBER: 106:5508
TITLE: Poly(maleamide hydrazides). Synthesis by ring-opening polyaddition of N,N'-bis(isomaleimide) with diamines
AUTHOR(S): Nagarathinam, R.; Viswanathan, S.
CORPORATE SOURCE: Dep. Polym. Sci., Univ. Madras, Madras, 600 025, India
SOURCE: Polymer Bulletin (Berlin, Germany) (1986), 16(2-3), 147-51
CODEN: POBUDR; ISSN: 0170-0839
DOCUMENT TYPE: Journal
LANGUAGE: English

IT 105779-92-8
RL: USES (Uses)
(model compound, for poly(maleamide hydrazides))

RN 105779-92-8 CAPLUS
CN 2-Butenoic acid, 4-oxo-4-(phenylamino)-, 2-[1,4-dioxo-4-(phenylamino)-2-butenyl]hydrazide (9CI) (CA INDEX NAME)



L14 ANSWER 41 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN

AB N,N'-Methanedianilinebis(isomaleimide) [53024-72-9] was prepared and polymerized with aliphatic diamines in N-methylpyrrolidone at room temperature to give polymers having inherent viscosity 0.12-1.03 dL/g. The polymers are soluble in concentrated

H₂SO₄, insol. in common organic solvents, and swell in amide-type solvents. The polymers begin to decompose at 190-215°.

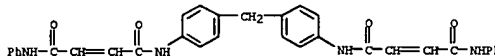
ACCESSION NUMBER: 1987:156955 CAPLUS
DOCUMENT NUMBER: 106:156955
TITLE: Synthesis and characterization of newer homopolymaleamides and copolymaleamides from N,N'-methanedianilinebis(isomaleimide) and aliphatic diamines

AUTHOR(S): Nagarathinam, Rangaswamy; Viswanathan, Seshaiyer
CORPORATE SOURCE: Dep. Polym. Sci., Univ. Madras, Madras, 600 025, India
SOURCE: Polymer Journal (Tokyo, Japan) (1986), 18(11), 865-9
CODEN: POLJBB; ISSN: 0032-3896

DOCUMENT TYPE: Journal
LANGUAGE: English

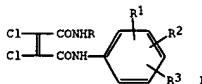
IT 106327-13-3P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as model for polyamides)

RN 106327-13-3 CAPLUS
CN 2-Butenediamide, N,N'-(methylenedi-4,1-phenylene)bis(N'-phenyl- (9CI) (CA INDEX NAME)



L14 ANSWER 43 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN

GI



AB A composition containing alkyphenyldichloromaleic acid diamides I (R = H, alkyl,

haloalkyl, alkenyl; R1,R2, R3 = H, alkyl, alkoxy, haloalkoxy, Cl, etc.) and RN(COR1)CHR2COR3 (R = (un)substituted Ph; R1 = alkyl, alkoxy, 5-6-membered S-, N-, O-containing heterocyclic residue, haloalkyl, cycloalkyl)

R2, R3 = alkyl; R2R3 = (CH₂)_n, n = 2-3] is a fungicide. Syntheses of I are given. Thus, a composition containing N-(2,6-dimethylphenyl)-N-(methoxycarbonyl)alanine Me ester and I (R = Et; R1 = R2 = H; R3 = 4-MeO) (125+125 ppm) controlled Colletotrichum lagenarium on cucumbers.

ACCESSION NUMBER: 1986:402225 CAPLUS
DOCUMENT NUMBER: 105:2225
TITLE: Fungicide composition
INVENTOR(S): Matsura, Kazuo; Baba, Tatsuhiro
PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 17 pp.
CODEN: JKOKAF

DOCUMENT TYPE: Patent
LANGUAGE: Japanese

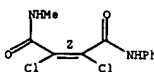
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 61000003	A2	19860106	JP 1984-119540	19840611
JP 1984-119540			JP 1984-119540	19840611

PRIORITY APPLN. INFO.:
IT 92668-17-2P 92691-21-9P
RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of, as fungicide)

RN 92668-17-2 CAPLUS
CN 2-Butenediamide, 2,3-dichloro-N-methyl-N'-phenyl-, (Z)- (9CI) (CA INDEX NAME)

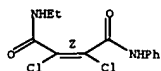
Double bond geometry as shown.



RN 92691-21-9 CAPLUS
CN 2-Butenediamide, 2,3-dichloro-N-ethyl-N'-phenyl-, (Z)- (9CI) (CA INDEX NAME)

L14 ANSWER 43 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

Double bond geometry as shown.



L14 ANSWER 44 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN

AB Compns. containing a poly(oxyphenylene) or its blends with a styrene resin and

a diamide RNHCOZCONHR, where Z is Cl-10 divalent hydrocarbon residue and R is Cl-10 hydrocarbon group, have improved moldability and are useful for engineering plastics. Thus, a composition containing poly(2,6-dimethyl-1,4-phenylene oxide) [24938-67-8] 70, 475D [90803-41-1] (high-impact polystyrene) 30, and N,N-diphenyladipic acid diamide [4456-80-8] 5 parts were mixed 7.5 min at 260° to give a composition with melt index (250°; load 10 kg) 2.8 g/10 min and heat-distortion temperature 148°.

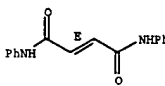
ACCESSION NUMBER: 1985:524465 CAPLUS
DOCUMENT NUMBER: 103:124465
TITLE: Poly(oxyphenylene) compositions with improved moldability
PATENT ASSIGNEE(S): Mitsubishi Petrochemical Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 13 pp.
CODEN: JIOOAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 60044547	A2	19850309	JP 1983-152208	19830820
JP 04033819	B4	19920604		

PRIORITY APPLN. INFO.:
IT 6833-07-4
RL: USES (Uses)

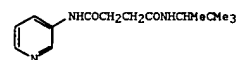
(polyoxyphenylene compns. containing, for improved moldability)
RN 6833-07-4 CAPLUS
CN 2-Butenediamide, N,N'-diphenyl-, (E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

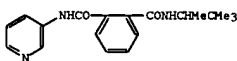


L14 ANSWER 45 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN

GI



I



II

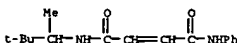
AB RNHCOZCONHR1 (R = aryl or 5-6-membered heteroaryl; R1 = branched alkyl or cycloalkyl; Z = bond, alkylene, CH2OCH2, cycloalkylene, heteroarylene, etc.) were prepared and shown to have antihypertensive activity. Thus, succinic anhydride was treated with Me3CCHMeNH2, then MeSO2Cl, and then 3-pyridinamine to give the diamide II. At 3 mg/kg II lowered the blood pressure in spontaneously hypertensive rats by 15 mm Hg.

ACCESSION NUMBER: 1985:6210 CAPLUS
DOCUMENT NUMBER: 102:6210
TITLE: Biscarboxamides for controlling illnesses
INVENTOR(S): Rosentreter, Ulrich; Niemers, Ekkehard; Stägelmeier, Hartmut; Knorr, Andreas; Garthoff, Bernhard
PATENT ASSIGNEE(S): Bayer A.-G., Fed. Rep. Ger.
SOURCE: Ger. Offen., 41 pp.
CODEN: GWQXRX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3305569	A1	19840823	DE 1983-3305569	19830218
EP 119428	A2	19840926	EP 1984-101205	19840207
EP 119428	A3	19850306		

R: AT, BE, CH, DE, FR, GB, IT, LI, NL, SE
ES 529686 A1 19850401 ES 1984-529686 19840213
JP 59163353 A2 19840914 JP 1984-24535 19840214
DK 8400766 A 19840819 DK 1984-766 19840217
ZA 8401183 A 19841031 ZA 1984-1183 19840217
ES 538151 A1 19851101 ES 1984-538151 19841130
PRIORITY APPLN. INFO.: DE 1983-3305569 A 19830218
OTHER SOURCE(S): CASREACT 102:6210
IT 93699-87-7P
RL: SPN (Synthetic preparation); PREP (Preparation of preparation of)

RN 93699-87-7 CAPLUS
CN 2-Butenediamide, N-phenyl-N'-(1,2,2-trimethylpropyl)- (9CI) (CA INDEX NAME)



L14 ANSWER 45 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN

(Continued)

L14 ANSWER 46 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN
 AB The processability of polyoxaphenyls is improved by addition of a diamide
 of

the formula $RNHC(O)Z(O)CNHR'$ (Z = divalent C1-10-hydrocarbon residue; R, R' = same or different C1-10-aliphatic, aromatic, alicyclic hydrocarbon residue). Thus, 2,6-xylenol polymer [25134-01-4] 50, high impact polystyrene [9003-53-6] 50, and N,N'-diphenyldipamide (I) [4456-80-8] 5 parts were melted and mixed 7.5 min at 260°. The melt index of the composition was 10 g/10 min, and the heat distortion temperature at 18.6 kg/cm² was

128°. When no I was present, the values were 3.4 g/10 min. and 130°, resp.

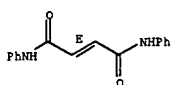
ACCESSION NUMBER: 1984:593130 CAPLUS
 DOCUMENT NUMBER: 101:193130
 TITLE: Poly(phenylene ether) compositions having improved processability
 INVENTOR(S): Tayama, Toshiyuki; Tanaka, Ryohei
 PATENT ASSIGNEE(S): Mitsubishi Petrochemical Co., Ltd., Japan
 SOURCE: Eur. Pat. Appl., 45 pp.
 CODEN: EPXOXDW
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 115218	A2	19840808	EP 1983-308004	19831229
EP 115218	A3	19870610		
EP 115218	B1	19891018		
R: DE, FR, GB, IT, NL				
JP 59124950	A2	19840719	JP 1982-233289	19821229
JP 02044335	B4	19901003		
US 4530952	A	19850723	US 1983-564190	19831222
PRIORITY APPLN. INFO.:			JP 1982-233289	A 19821229

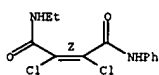
IT 6833-07-4
 RL: USES (Uses)
 (polyoxaphenyls containing, processability of)

RN 6833-07-4 CAPLUS
 CN 2-Butenediamide, N,N'-diphenyl-, (E)- (9CI) (CA INDEX NAME)

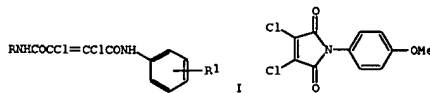
Double bond geometry as shown.



L14 ANSWER 47 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



L14 ANSWER 47 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN
 GI



AB Seventy-five antifungal dichloromaleimides I (R = H, Me, Et, Pr, Br(CH₂)₃, Bu; R1 = H, OMe, OCH₂CH₂, 3,4-Cl₂, 2,6-Me₂, etc.), effective against Phytophthora infestans in tomato or Pseudoperonospora cubensis in cucumber, were prepared from (iso)maleimides, e.g. II. Thus, 81.6 g II was dissolved in CH₂Cl₂ and stirred with 19.3 g 70% aqueous EtNH₂ at room temperature

for 2 h to give 47.6 g I (R = Et, R1 = 4-MeO).
 ACCESSION NUMBER: 1984:591372 CAPLUS
 DOCUMENT NUMBER: 101:191372
 TITLE: N-Phenyldichloromaleimides
 PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 15 pp.
 CODEN: JKOXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 59106447	A2	19840620	JP 1982-217502	19821210
JP 59106447	A2	19840620	JP 1982-217502	19821210

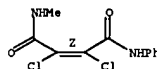
PRIORITY APPLN. INFO.:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 59106447	A2	19840620	JP 1982-217502	19821210
JP 59106447	A2	19840620	JP 1982-217502	19821210

IT 92668-17-2P 92691-21-9P
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
 (preparation and antifungal activity of)

RN 92668-17-2 CAPLUS
 CN 2-Butenediamide, 2,3-dichloro-N-methyl-N'-phenyl-, (Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RN 92691-21-9 CAPLUS
 CN 2-Butenediamide, 2,3-dichloro-N-ethyl-N'-phenyl-, (Z)- (9CI) (CA INDEX NAME)

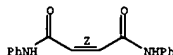
Double bond geometry as shown.

L14 ANSWER 48 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN
 AB The reaction of amines with carboxylic acids was catalyzed by PhSO₂Cl-Et₃N mixts.; triethylenediamine was also used in the place of Et₃N. Thus, PhNH₂ with PhCO₂H, Et₃N, and PhSO₂Cl gave PhCONHPh.

ACCESSION NUMBER: 1984:472392 CAPLUS
 DOCUMENT NUMBER: 101:72392
 TITLE: Acylation of primary and secondary amines with carboxylic acids in the presence of aromatic sulfochlorides and tertiary amines
 AUTHOR(S): Urbanski, Jerry; Hanek, Maria Beata
 CORPORATE SOURCE: Inst. Org. Mater. Sci., Sch. Eng., Radom, 26600, Pol.
 SOURCE: Polish Journal of Chemistry (1983), 57(4-5-6), 603-5
 CODEN: PJCHDQ; ISSN: 0137-5083
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 101:72392
 IT 59411-44-8P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)

RN 59411-44-8 CAPLUS
 CN 2-Butenediamide, N,N'-diphenyl-, (Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

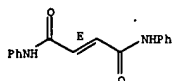


L14 ANSWER 49 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN

AB Ten polyfumaramides based on p,p'-aromatic diamines [H₂NZ₂NH₂; Z = p-C₆H₄, p-C₆H₄C₆H₄-p, 3,3'-dimethyl-4,4'-biphenylene, p-C₆H₄CH:CHC₆H₄-p, p-C₆H₄N:NC₆H₄-p, CH₂(C₆H₄-p)₂, O(C₆H₄-p)₂, SO₂(C₆H₄-p)₂, p-C₆H₄CH₂CH₂C₆H₄-p, and (p-C₆H₄O-p-C₆H₄)₂CMe₂] and fumaric acid (I) were synthesized by the phosphorylation method (F. Higashi et al., 1980). The polymers were characterized by viscosity, solubility, IR and UV-visible spectroscopy, and thermogravimetry. The fluorescence spectra of the 4,4'-diaminodiphenyl sulfone-I copolymer [87150-29-6] were studied. A model compound, fumaroyldianilide [6833-07-4], was synthesized and characterized.

ACCESSION NUMBER: 1983:523050 CAPLUS
DOCUMENT NUMBER: 99:123050
TITLE: Synthesis and characterization of certain aromatic polyfumaramides
AUTHOR(S): Sachindrapal, P.; Nanjan, M. J.
CORPORATE SOURCE: A. C. Coll. Campus, Univ. Madras, Madras, 600 025, India
SOURCE: Journal of Polymer Science, Polymer Chemistry Edition (1983), 21(8), 2301-9
CODEN: JPLCAT; ISSN: 0449-296X
DOCUMENT TYPE: Journal
LANGUAGE: English
IT 6833-07-4
RL: USES (Uses)
(model, for aromatic polyfumaramides, preparation and characterization of)
RN 6833-07-4 CAPLUS
CN 2-Butenediamide, N,N'-diphenyl-, (E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



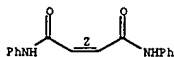
L14 ANSWER 51 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN

AB Dielec. strength (Ed) of polypropylene [9003-07-0] modified with 10% N,N'-diphenylmaleamide (I) [59411-44-8] depends greatly on pressure and shear deformation in the Bridgman anvil test. The torsion angle and pressure are given for maximum Ed. The maximum Ed at 700-800 MPa was

attributed to equilibrium between the I crushing and formation of microcracks in the polymer matrix. Decreasing the torsion angle resulted in a shift of the maximum to lower pressures.

ACCESSION NUMBER: 1982:617248 CAPLUS
DOCUMENT NUMBER: 97:217248
TITLE: Effect of low-molecular-weight additives on the electric strength of polypropylene exposed to high pressure and shear deformations
AUTHOR(S): Hagerramov, A. M.; Kryuchkov, A. N.; Zhorin, V. A.; Nikol'skii, V. G.; Knikolopyan, N. S.
CORPORATE SOURCE: Inst. Khim. Fiz., Moscow, USSR
SOURCE: Vysokomolekulyarnye Soedineniya, Seriya B: Kratkie Soobshcheniya (1982), 24(8), 589-91
CODEN: VYSBAI; ISSN: 0507-5483
DOCUMENT TYPE: Journal
LANGUAGE: Russian
IT 59411-44-8
RL: USES (Uses)
(polypropylene modified with, dielec. strength of, pressure and shear deformation effect on)
RN 59411-44-8 CAPLUS
CN 2-Butenediamide, N,N'-diphenyl-, (2Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



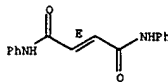
L14 ANSWER 50 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN

G1

AB Photochem. cleavage of head-to-head coumarin dimers and their lactone-opened derivs. on irradiation with 277 nm light gave 2 mols. of coumarin derivative by sym. fission and/or (2-HOC₆H₄CH:)₂ (I) and fumaric/maleic acid derivs. by asym. fission. E.g., irradiation of cyclobutane II in EtOH for 1 h gave a 36:64 mixture of the sym. cleavage product 2-HOC₆H₄CH:CHCO₂Et and asym. cleavage products I and (EtO₂CCH:)₂, quant. The direction of cleavage is mainly determined by the basic structure of the substrate, the photocleavage proceeding exclusively with retention of the ring structure when there is a stable 5- or 6-membered ring fused to the cyclobutane. Steric repulsions between substituents on the cyclobutane ring exert a secondary effect.

ACCESSION NUMBER: 1983:521855 CAPLUS
DOCUMENT NUMBER: 99:121855
TITLE: Symmetric and asymmetric photocleavage of the cyclobutane rings in head-to-head coumarin dimers and their lactone-opened derivatives
AUTHOR(S): Yonezawa, Noriyuki; Yoshida, Tsuyoshi; Hasegawa, Masaki
CORPORATE SOURCE: Dep. Synth. Chem., Univ. Tokyo, Tokyo, 113, Japan
SOURCE: Journal of the Chemical Society, Perkin Transactions 1: Organic and Bio-Organic Chemistry (1972-1999) (1983), (5), 1083-6
CODEN: JCPRB4; ISSN: 0300-922X
DOCUMENT TYPE: Journal
LANGUAGE: English
IT 6833-07-4P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, by photolysis of lactone-opened coumarin dimer)
RN 6833-07-4 CAPLUS
CN 2-Butenediamide, N,N'-diphenyl-, (E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



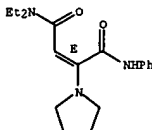
L14 ANSWER 52 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN

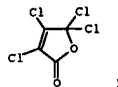
G1

AB Vinylolithium derivs. I (R = Li, R₁ = OMe, NMe₂) and R₁LiC(OMe)CO₂Me (II) obtained by direct lithiation of the corresponding functionalized acrylic acid derivs. I and II (R = H), reacted with heterocumulenes Z:C:Z₁ (Z = O, Z₁ = NPh, NPr, O; Z = S, Z₁ = NPh, NPr) to give oxalacetic acid derivs. I [R = C(2)Z₁H], III, HO₂CCOCH₂CO₂R₁, pyrrolinediones IV, and thiophenones V. HO₂CCOCH₂CO₂R₁ were prepared in a single-step reaction.

ACCESSION NUMBER: 1982:527436 CAPLUS
DOCUMENT NUMBER: 97:127436
TITLE: Vinyl carbanions. 13. Simple synthesis of oxalacetic acid derivatives
AUTHOR(S): Schmidt, Richard R.; Talbiersky, Joerg; Betz, Rainer
CORPORATE SOURCE: Fak. Chem., Univ. Konstanz, Konstanz, D-7750, Fed. Rep. Ger.
SOURCE: Chemische Berichte (1982), 115(7), 2674-8
CODEN: CHEBAM; ISSN: 0009-2940
DOCUMENT TYPE: Journal
LANGUAGE: German
OTHER SOURCE(S): CASREACT 97:127436
IT 82957-62-8P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 82957-62-8 CAPLUS
CN 2-Butenediamide, N₄,N₄-diethyl-N₁-phenyl-2-(1-pyrrolidinyl)-, (E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

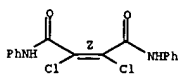




AB The title compound (I) reacted with $\text{NH}_3\text{-Et}_2\text{O}$ to give $\text{NCClCl:CClCO}_2\text{NH}_4$ and with aqueous NH_3 to give $\text{NCClCl:C(NH}_2\text{)CO}_2\text{NH}_4$ which on acid hydrolysis gave dichloromaleimide and aminochloromaleimide, resp. I also reacted with RNH_2 (R = optionally substituted alkyl, Ph) to give $\text{RNHCOC(Cl)CClCONHR}$, some of which were aminated to $\text{RNHCOC(NHR):C(NHR)CONHR}$ or cyclized to aminomaleimides.

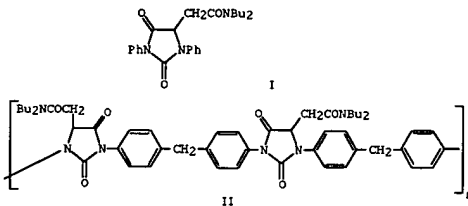
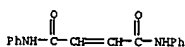
ACCESSION NUMBER: 1981:619760 CAPLUS
DOCUMENT NUMBER: 95:219760
TITLE: Acylation of amines with dichloromaleoyl chloride
AUTHOR(S): Bonse, Gerhard; Blank, Heinz Ulrich
CORPORATE SOURCE: Bayer A.-G., Leverkusen, D-5090, Fed. Rep. Ger.
SOURCE: Liebigs Annalen der Chemie (1981), (9), 1658-64
CODEN: LACHDL; ISSN: 0170-2041
DOCUMENT TYPE: Journal
LANGUAGE: German
OTHER SOURCE(S): CASREACT 95:219760
IT 79837-70-0P
RL: SPN (Synthetic preparation); PREP (Preparation)
RN 79837-70-0 CAPLUS
CN 2-Butenediamide, 2,3-dichloro-N,N'-diphenyl-, (2Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



AB A study of the absorption spectra of the complexes between 12 acyl-substituted Ph hydroxylamines and Fe(III) , Ce(IV) , V(V) , Ti(IV) , Nb(V) , and Ta(V) was made. Some of the spectra are shown in graphs. Some of the absorptions in the cases of metals having unfilled d-orbitals are attributed to charge transfer. For these the bathochromic shift from the absorption of the free ligand decreases with length of the coordinated chain in the ligand. Hence, the simpler mols. are suitable for determining Fe^{3+} , etc. Others of the transitions are attributed to transitions between energy levels of the ligand. A table of bond orders calculated by quantum mechanics is given for the ligands along with another table comparing calculated absorptions with exptl. For elements not forming

charge transfer complexes, the longer the coordinated chain the better.
ACCESSION NUMBER: 1981:488346 CAPLUS
DOCUMENT NUMBER: 95:88346
TITLE: Interpretation of light absorption spectra of acyl-substituted phenylhydroxylamines and their complexes with iron(III) ions
AUTHOR(S): Shpak, E. A.; Shpak, A. V.
CORPORATE SOURCE: Kiev. Gos. Univ., Kiev, USSR
SOURCE: Ukrainskii Khimicheskii Zhurnal (Russian Edition) (1981), 47(2), 211-18
CODEN: UKZHAU; ISSN: 0041-6045
DOCUMENT TYPE: Journal
LANGUAGE: Russian
IT 77500-28-8D, complexes with metals
RL: PRP (Properties)
(UV spectra of)
RN 77500-28-8 CAPLUS
CN 2-Butenediamide, N,N'-diphenyl-, (9CI) (CA INDEX NAME)



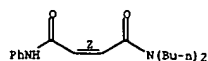
AB Hydantoin was prepared by the reaction of organic isocyanates with maleimide. Thus, PhNCO reacted with (2)- $\text{PhNHCOCH:CHCONBu}_2$ in xylene at 50° to give I. The polymeric hydantoin II, useful for the preparation of elastic lacquer films, was prepared by the reaction of $(\text{Bu}_2\text{NCOCH:CHCONHC}_6\text{H}_4\text{-p})_2\text{CH}_2$ with $\text{CH}_2(\text{C}_6\text{H}_4\text{NCO-4})_2$.

ACCESSION NUMBER: 1979:54938 CAPLUS
DOCUMENT NUMBER: 90:54938
TITLE: Hydantoin
INVENTOR(S): Zecher, Wilfried; Merten, Rudolf
PATENT ASSIGNER(S): Bayer A.-G., Fed. Rep. Ger.
SOURCE: Ger. Offen., 19 pp.
CODEN: GWXXEX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2714655	A1	19781005	DE 1977-2714655	19770401
US 4182812	A	19800108	US 1977-854111	19771123
FR 2385752	A1	19781027	FR 1977-35932	19771129
FR 2385752	B1	19831014		
JP 53124268	A2	19781030	JP 1977-142324	19771129
GB 1579443	A	19801119	GB 1977-49601	19771129
AT 7708537	A	19830315	AT 1977-8537	19771129
AT 372690	B	19831110		
US 4281140	A	19810728	US 1979-61061	19790726
PRIORITY APPLN. INFO.:			DE 1977-2714655	A 19770401
			US 1977-854111	A3 19771123

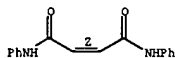
IT 68577-24-2
RL: RCT (Reactant); RACT (Reactant or reagent)
(cyclocondensation of, with isocyanates, hydantoin from)
RN 68577-24-2 CAPLUS
CN 2-Butenediamide, N,N'-dibutyl-N'-phenyl-, (2Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



L14 ANSWER 56 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 RN 59411-44-8 CAPLUS
 CN 2-Butenediamide, N,N'-diphenyl-, (2Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



AB Phospholene and phospholane 1-oxide are used as highly active catalysts in reaction of isocyanates with carboxylic acid or anhydride to give imides, amides, imide-amide or polymers containing these groups. Thus, azelaic acid 18.82, trimellitic anhydride 19.21, and 1,3-dimethyl-3-phospholene 1-oxide (I) [15450-79-0] 0.07 g were mixed with 298 mL tetramethylenesulfone, heated to 150°, treated with 50.05 g 4,4'-methylenebis(Ph isocyanate) in 60 mL tetramethylenesulfone over 6 h and 40 min, and cooled to room temperature, giving 70 g of a copolyamide-imide (II) [56551-73-6] which had intrinsic viscosity 1.25 as 0.5% solution in N-methylpyrrolidone. II was pelletized and injection molded into samples which had tensile strength 878.8 kg/cm², Young's modulus 23200 kg/cm², elongation at break 16.5%, bending strength 1212 kg/cm², notched and unnotched Izod impact strength 3.04 and >20 ft-lb/in, resp., and heat distortion temperature 150° under a load of 18.55 kg/cm².

ACCESSION NUMBER: 1978:547397 CAPLUS
 DOCUMENT NUMBER: 89:147397
 TITLE: Catalysis of the reaction between an organic isocyanate and an organic carboxylic acid and/or an organic carboxylic acid anhydride
 INVENTOR(S): Onder, Kemal Besir; Smith, Curtis Page
 PATENT ASSIGNEE(S): Upjohn Co., USA
 SOURCE: Ger. Offen., 32 pp.
 CODEN: GWXXBX
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

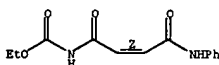
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2801701	A1	19780727	DE 1978-2801701	19780116
DE 2801701	C2	19860918		
US 4156065	A	19790522	US 1977-761614	19770121
GB 1575669	A	19800924	GB 1977-53260	19771221
NL 7800518	A	19780725	NL 1978-518	19780116
NL 187849	B	19910902		
NL 187849	C	19920203		
JP 53092703	A2	19780815	JP 1978-5148	19780120
JP 59040142	B4	19840928		
FR 2378000	A1	19780818	FR 1978-1616	19780120
FR 2378000	B1	19830909		
PRIORITY APPLN. INFO.:			US 1977-761614	A 19770121
IT 59411-44-8P				
RL: IMF (Industrial manufacture); PREP (Preparation)				
(manufacture of, catalysts for)				

L14 ANSWER 57 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN
 AB N-carbathoxymaleimide (I) [55750-49-7], an intermediate to maleoylamino acids in aqueous solution, also reacts with amines in ether. Thermolysis of the resulting amide-imides at 170-80° gave N-substituted maleimides. N,N-dimethyl-1,3-propanediamine [109-55-7] reacted with I to give N-(3-dimethylaminopropyl)maleimide [5135-54-6] directly. Copolymers of divinylbenzene with a number of maleoylamino acid derivs. were prepared and studied.

ACCESSION NUMBER: 1977:121818 CAPLUS
 DOCUMENT NUMBER: 86:121818
 TITLE: Studies in cyclopolymerization. XIV. Cyclocopolymerization study of certain maleoylamino acids with divinyl ether
 AUTHOR(S): Butler, George B.; Zampini, Anthony
 CORPORATE SOURCE: Cent. Macromol. Sci., Univ. Florida, Gainesville, FL, USA
 SOURCE: Journal of Macromolecular Science, Chemistry (1977), A11(3), 491-506
 CODEN: JMCHBD; ISSN: 0022-233X
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 IT 62205-60-1P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 62205-60-1 CAPLUS
 CN Carbamic acid, [1,4-dioxo-4-(phenylamino)-2-butenyl]-, ethyl ester, (2Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



L14 ANSWER 58 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN

AB Reference x-ray diffraction patterns were obtained for the anilide derivs. of 32 carboxylic acids containing ≤18 atoms. Even closely related acids which differ only in isomeric form produce anilide derivs. which exhibit different and characteristic x-ray diffraction patterns.

ACCESSION NUMBER: 1977:120153 CAPLUS

DOCUMENT NUMBER: 86:120153

TITLE: Characterization of carboxylic acids: identification of their anilide derivatives by x-ray diffractometry
AUTHOR(S): Garska, Kenneth J.
CORPORATE SOURCE: Res. Dev. Dep., Union Carbide Corp., South Charleston, WV, USA

SOURCE: Applied Spectroscopy (1976), 30(2), 204-9

CODEN: AFSPA4; ISSN: 0003-7028

DOCUMENT TYPE: Journal

LANGUAGE: English

IT 59411-44-8

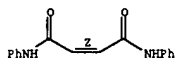
RL: PROC (Process)

(X-ray diffraction of)

RN 59411-44-8 CAPLUS

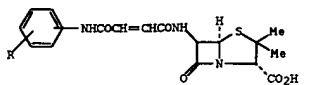
CN 2-Butenediamide, N,N'-diphenyl-, (2Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



L14 ANSWER 59 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN

GI



AB Ten N-substituted maleic acid monoamides, prepared by reaction of maleic anhydride [108-31-6] with the corresponding substituted (or unsubstituted) anilines, were reacted with methyl chloroformate [79-22-1] followed by 6-aminopenicillanic acid [551-16-6] to yield 6-aminopenicillanic acid derivs. (I). The penicillins showed antimicrobial activity in vitro against gram-pos. bacteria, but not against gram-neg. bacteria. The I compds. where R = H or o-Br were the most active. These 2 derivs. were comparable in effectiveness to methacillin against various species and were more effective than benzylpenicillin against penicillin-resistant Staphylococcus aureus.

ACCESSION NUMBER: 1977:580 CAPLUS

DOCUMENT NUMBER: 86:580

TITLE: Synthesis of some derivatives of 6-aminopenicillanic acid based on N-substituted maleic acid monoamides
AUTHOR(S): Sokolov, L. B.; Trakhtenberg, M. G.; Myasnikova, L. G.
CORPORATE SOURCE: Leningr. Nauchno-Issled. Inst. Antibiot., Leningrad, USSR

SOURCE: Khimiko-Farmatsevticheskii Zhurnal (1976), 10(3), 50-3

CODEN: KHFZAN; ISSN: 0023-1134

DOCUMENT TYPE: Journal

LANGUAGE: Russian

IT 59652-97-0P

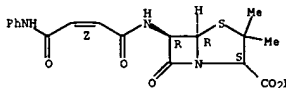
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation and bactericidal activity of)

RN 59652-97-0 CAPLUS

CN 4-Thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid, 6-[[[1,4-dioxo-4-(phenylamino)-2-butenyl]amino]-3,3-dimethyl-7-oxo-, [2S-[2a,5a,6a(2)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.



L14 ANSWER 60 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN

AB Maleic anhydride-amine condensation products and formaldehyde-styrenated phenol-maleic anhydride polymer were antioxidants for natural rubber. Thus, natural rubber containing 1 phr aniline-maleic anhydride diamide (I) [59411-44-8] had, after aging at 100° for 72 hr, retention

of tensile strength 69.72%, compared with 9.44% in the absence of I.

ACCESSION NUMBER: 1976:434324 CAPLUS

DOCUMENT NUMBER: 85:34324

TITLE: Maleic anhydride condensation products as antioxidants for natural rubber vulcanizates

AUTHOR(S): Patel, D. K.; Krishnan, V.

CORPORATE SOURCE: Dep. Chem. Technol., Univ. Bombay, Bombay, India

SOURCE: Rubber India (1976), 28(2), 16-21

CODEN: RUIDA4; ISSN: 0035-9491

DOCUMENT TYPE: Journal

LANGUAGE: English

IT 59411-44-8

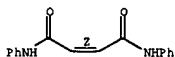
RL: MOA (Modifier or additive use); USES (Uses)

(antioxidants, for natural rubber)

RN 59411-44-8 CAPLUS

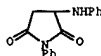
CN 2-Butenediamide, N,N'-diphenyl-, (2Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



L14 ANSWER 61 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN

GI



AB The title reaction (at 195° with a 20:1 molar ratio) gave a mixture of PhNHCOCH2CH(NHPh)CONHPh (I), Z-PhNHCOCH:CHCONHPh (II), and III. Only II and III were obtained in the thermal reaction. Spectral data for I, II, and III were given.

ACCESSION NUMBER: 1976:405420 CAPLUS

DOCUMENT NUMBER: 85:5420

TITLE: Radiation-chemical reaction of aniline with maleic anhydride

AUTHOR(S): Nesterovskii, V. V.; Voznesenskaya, S. V.; Ermolaev, M. V.; Brodskii, E. S.; Lukashenko, I. M.; Belozеров, A. L.

CORPORATE SOURCE: USSR

SOURCE: Zhurnal Obshchei Khimii (1976), 46(4), 935-6

CODEN: ZOKH44; ISSN: 0044-460X

DOCUMENT TYPE: Journal

LANGUAGE: Russian

OTHER SOURCE(S): CASREACT 85:5420

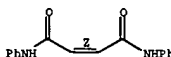
IT 59411-44-8P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)

RN 59411-44-8 CAPLUS

CN 2-Butenediamide, N,N'-diphenyl-, (2Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



L14 ANSWER 62 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN

AB The ring-opening polyaddn. reaction of N,N'-disubstituted bis(isomaleimides) (BMI) with various diamines at room temperature in N-methyl-2-pyrrolidone (I) gave the polyamaleimides [-C(O)CH=CHC(O)NHZNH-]n (II, Z = direct bond, (CH2)6, p-C6H4OC6H4-p; Z1 = (CH2)6, CH2-m-C6H4CH2, p-C6H4CH2H4-p, p-C6H4OC6H4-p). II was obtained in almost quant. yields and had inherent viscosity 0.7 (0.5 g/dl in 30%). Most of the polyamides were soluble in solvents such as Me2SO, MeCONH2, m-cresol, and HCO2H. They did not show any melt temperature and began to decompose at 200-300°. Model compds. were prepared by the addition reaction of the BMI with aniline [62-53-3].

ACCESSION NUMBER: 1975:579660 CAPLUS

DOCUMENT NUMBER: 83:179660

TITLE: Synthesis of polyamaleimides by ring-opening polyaddition reaction of N,N'-disubstituted bis(isomaleimides) with diamines

AUTHOR(S): Imai, Yoshio; Ueda, Mitsuru; Kanno, Susumu
CORPORATE SOURCE: Fac. Eng., Yamagata Univ., Yonezawa, Japan
SOURCE: Journal of Polymer Science, Polymer Chemistry Edition (1975), 13(7), 1691-8
CODEN: JPLCAT; ISSN: 0449-296X

DOCUMENT TYPE: Journal

LANGUAGE: English

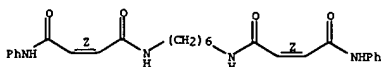
IT 7126-26-3P 57018-29-8P 57018-30-1P

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as model compound for bis(isomaleimides) polyaddn. reaction with diamines)

RN 7126-26-3 CAPLUS

CN 2-Butenediamide, N,N''-1,6-hexanediylbis[N'-phenyl- (9CI) (CA INDEX NAME)

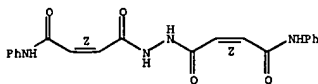
Double bond geometry as shown.



RN 57018-29-8 CAPLUS

CN 2-Butenoic acid, 4-oxo-4-(phenylamino)-, 2-[1,4-dioxo-4-(phenylamino)-2-butenyl]hydrazide, (Z,Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RN 57018-30-1 CAPLUS

CN 2-Butenediamide, N,N''-(oxydi-4,1-phenylene)bis[N'-phenyl-, (Z,Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

L14 ANSWER 63 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN

GI For diagram(s), see printed CA Issue.

AB FCOC.tplbond.CCOF reacted with PhNH2 and substituted anilines under strict nonacid conditions to yield 1-arylamino-4-arylimino-α-crotonolactones, e.g. I. Under acidic conditions the isomeric 1-arylamino-4-arylimino-α-crotonolactones, e.g. II, formed. The configuration of I was deduced chemical by mild reduction with NaBH4 to give 3-anilino-2-hydroxy-5-phenylamino-2,5-dihydrofuran, which was reoxidized back to I with MnO2. The reduction of II, gave 4-anilino-5-hydroxy-3-pyrrolin-2-one. Excess PhNH2 and FCOC.tplbond.CCOF gave only PhNHCOCH2C(=NPh)CONHPh, which was tautomerized slowly in Me2SO at 50° to PhNH(CONHPh):CHCONHPh. The isomerization was irreversible and catalyzed by acid.

ACCESSION NUMBER: 1975:97640 CAPLUS

DOCUMENT NUMBER: 82:97640

TITLE: Acetylenedicarbonyl fluoride. II. Its reaction with arylamines to yield isomaleimides, maleimides, and α-phenylimino- and α-phenylaminofuranides
AUTHOR(S): Herkes, F. E.
CORPORATE SOURCE: Exp. Stn., E. I. du Pont de Nemours and Co., Wilmington, DE, USA
SOURCE: Journal of Organic Chemistry (1975), 40(4), 423-8
CODEN: JOCEAH; ISSN: 0022-3263

DOCUMENT TYPE: Journal

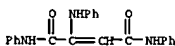
LANGUAGE: English

IT 53683-87-7P

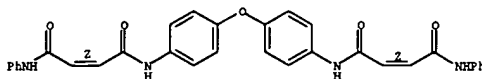
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 53683-87-7 CAPLUS

CN 2-Butenediamide, N,N'-diphenyl-2-(phenylamino)- (9CI) (CA INDEX NAME)



L14 ANSWER 62 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



L14 ANSWER 64 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN

AB Fumarimides such as, N,N'-fumaroyldipiperidine (I) [5602-33-5], N,N'-fumaroyldimorpholine (II) [5602-34-6], or N,N'-fumaroyldi-α-dipyrrolidinone (III) [41967-68-4] were polymerized or copolymerized with styrene in the presence of a radical initiator or by irradiation with uv light. I or II copolymerized with styrene to form a random copolymer, whereas III tended to form an alternating copolymer with styrene, suggesting that the electron distribution of the heterocyclic ring affected the polymerizability of fumarimide amide derivs. The photopolymerizability of the fumarimides were lower than that of α,β-unsatd. esters.

ACCESSION NUMBER: 1974:521091 CAPLUS

DOCUMENT NUMBER: 81:121091

TITLE: Radical polymerizability of fumarimide derivatives
AUTHOR(S): Azuma, C.; Ogata, N.
CORPORATE SOURCE: Dep. Chem., Sophia Univ., Tokyo, Japan
SOURCE: Journal of Polymer Science, Polymer Chemistry Edition (1974), 12(4), 751-60
CODEN: JPLCAT; ISSN: 0449-296X

DOCUMENT TYPE: Journal

LANGUAGE: English

IT 37625-36-8P

RL: SPN (Synthetic preparation); PREP (Preparation)
effect (monomer reactivity ratio in preparation of, double bond reactivity on)

RN 37625-36-8 CAPLUS

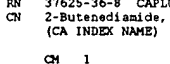
CN 2-Butenediamide, N,N'-diphenyl-, (E)-, polymer with ethenylbenzene (9CI) (CA INDEX NAME)

CH 1

CRN 6833-07-4

CMF C16 H14 N2 O2

Double bond geometry as shown.



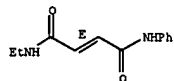
CH 2

CRN 100-42-5

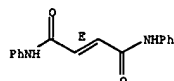
CMF C8 H8

H2C=CH-Ph

L14 ANSWER 65 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN
 G1 For diagram(s), see printed CA issue.
 AB Treatment of N-phenylisomaleimide (I) with aziridine gave
 3-(N-aziridinyl)-N-phenylsuccinimide (II) identical with the adduct formed
 between N-phenylmaleimide (III) and ethylenimine. The isomerization
 proceeded through the intermediate II whose decomposition in solution to a
 mixture of III, IV, and V is also described.
 ACCESSION NUMBER: 1974:145925 CAPLUS
 DOCUMENT NUMBER: 80:145925
 TITLE: Aziridine induced isomerization of isomaleimides to
 maleimides
 AUTHOR(S): Joseph-Nathan, P.; Mendoza, V.; Garcia G, E.
 CORPORATE SOURCE: Cent. Invest. Estud. Avanzados, Inst. Politec. Nac.,
 Mexico D. F., Mex.
 SOURCE: Canadian Journal of Chemistry (1974), 52(1), 129-31
 CODEN: CJCHAG; ISSN: 0008-4042
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 IT 52380-83-3P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 52380-83-3 CAPLUS
 CN 2-Butenediamide, N-ethyl-N'-phenyl-, (E)- (9CI) (CA INDEX NAME)
 Double bond geometry as shown.

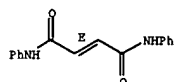


L14 ANSWER 66 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN
 AB Copolymerizability of N-substituted fumaramides with styrene [100-42-5]
 decreased with increasing amide resonance in the order:
 N,N,N',N'-tetraethylfumaramide [17878-64-7] > N,N'-dibutylfumaramide
 [35632-97-4] > N,N'-diphenylfumaramide [6833-07-4]. The
 photopolymerizability of acrylanilide derivs. was affected by a
 substituent on the phenyl group and the photo-induced polymerization rates
 decreased in the order: p-methoxy >> p-nitro > H > p-Me >> 2,6-dichloro.
 The polymerizability of unsatd. amide compds. was generally greater than
 that of other α,β -unsatd. carbonyl compds.
 ACCESSION NUMBER: 1972:475560 CAPLUS
 DOCUMENT NUMBER: 77:75560
 TITLE: Radical- and photopolymerization of unsaturated amide
 compounds
 AUTHOR(S): Azuma, Chiaki; Ogata, Naoya
 CORPORATE SOURCE: Dep. Chem., Sophia Univ., Tokyo, Japan
 SOURCE: Kobunshi Kagaku (1972), 29(4), 254-9
 CODEN: KOKAAM; ISSN: 0023-2556
 DOCUMENT TYPE: Journal
 LANGUAGE: Japanese
 IT 6833-07-4P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 6833-07-4 CAPLUS
 CN 2-Butenediamide, N,N'-diphenyl-, (E)- (9CI) (CA INDEX NAME)
 Double bond geometry as shown.



IT 37625-36-8P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of, reactivity ratios in)
 RN 37625-36-8 CAPLUS
 CN 2-Butenediamide, N,N'-diphenyl-, (E)-, polymer with ethenylbenzene (9CI)
 (CA INDEX NAME)
 CM 1
 CRN 6833-07-4
 CMF C16 H14 N2 O2

Double bond geometry as shown.

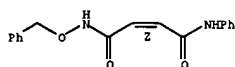


CM 2

L14 ANSWER 66 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 CRN 100-42-5
 CMF C8 H8

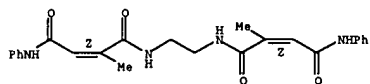


L14 ANSWER 67 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN
 AB The dehydration of N-benzoyloxy and N-hydroxymaleamic acids and the
 isomerization of N-benzoyloxyisomaleimide were carried out under various
 conditions to obtain N-benzoyloxyisomaleimide, N-hydroxyisomaleimide, and
 N-benzoyloxymaleimide. N-Substituents, such as benzoyloxy, hydroxy, and
 acetoxy groups, depress the reactivity of N electronically and facilitate
 the formation of isomaleimides in the dehydration of N-substituted
 maleamic acids. The thermal isomerization of N-benzoyloxyisomaleimide to
 the maleimide was successful only in DMF. Conversion of isomaleimide to
 maleimide was performed via the addition of HBr to isomaleimide followed by
 isomerization and dehydrobromination.
 ACCESSION NUMBER: 1971:99431 CAPLUS
 DOCUMENT NUMBER: 74:99431
 TITLE: Dehydration of N-benzoyloxy and N-hydroxymaleamic acid
 and the isomerization of N-benzoyloxyisomaleimide
 AUTHOR(S): Narita, Mitsuaki; Akiyama, Masayasu; Okawara, Makoto
 CORPORATE SOURCE: Res. Lab. Resour. Util., Tokyo Inst. Technol., Tokyo,
 Japan
 SOURCE: Bulletin of the Chemical Society of Japan (1971),
 44(2), 437-41
 CODEN: BCSJAB; ISSN: 0009-2673
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 IT 32345-48-5P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 32345-48-5 CAPLUS
 CN Maleamide, N-(benzoyloxy)-N'-phenyl- (8CI) (CA INDEX NAME)
 Double bond geometry as shown.



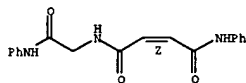
L14 ANSWER 68 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN
 G1 For diagram(s), see printed CA Issue.
 AB Diamines react with dry unsatd. cyclic imides to form the corresponding diimides by addition at the double bond. Thus, 5.5 g N-methylmaleimide and 1.3 g (CH₂NH₂)₂ in absolute EtOH kept overnight gave 40% I [R = Me, A = (CH₂)₂, m. 146-8° (di-HCl salt m. 230°)]. Similarly were prepared 34-90% the following I (R and A shown): Me, (CH₂)₆, m. 115°; Ph, (CH₂)₂, m. 210-11°; and Ph, (CH₂)₆, m. 151-1.5°. Similar reaction with piperazine gave the following II (R and R₁ shown): Me, H, m. 178-9°; Ph, H, m. 239-40°; and Ph, Me, m. 189-90°. I [R = Me, A = (CH₂)₂] kept 3 days with aqueous MeNH₂ gave [CH₂NHCH(CONHMe)CH₂CONHMe]₂, m. 205°; similarly was prepared the 1,4-piperazine analog, m. 249-51°. I [R = Me, A = (CH₂)₆] (di-HCl salt m. 223-4°; dinitroso derivative m. 163-4°) kept with aqueous MeNH₂ gave [(CH₂)₃NHCH(CONH₂)CH₂CONHMe]₂, m. 198°. II (R = Me, R₁ = H) in the above preparation also formed an isomer, m. 240-1°, the low m. isomer (m. 178-9°) gave an HCl salt, m. 189-90°, while the other isomer gave a di-HCl salt, m. 323-4°, and a mono-HCl salt, m. 210-12°; II (R = Ph, R₁ = H) and aqueous NH₃ gave III, m. 224-5°. Reaction of (CH₂NH₂)₂ with N-phenylmaleimide in EtOH 2-3 days without rigid exclusion of moisture gave 6% 1:2 adduct, m. 210-11°, identical with I [R = Ph, A = (CH₂)₂] above, along with 44% 1:1 adduct identified as piperazinoacetanilide, m. 159-9.5° (HCl salt m. 216-17°; nitroso derivative m. 191-2°. Similar reaction of (CH₂NH₂)₂ with N-phenylcitraconimide in EtOH 16 hr. gave 23% N,N'-diphenylethylenebiscitraconamide, m. 166-9°. Similarly, piperazine gave 34% II (R = Ph, R₁ = Me), m. 189-90°, and 47% IV, m. 235-5.5°.

ACCESSION NUMBER: 1970:477198 CAPLUS
 DOCUMENT NUMBER: 73:77198
 TITLE: Synthesis of alkylene-N,N'-bisaspartic acid diimides
 AUTHOR(S): Sheremeteva, T. V.; Sharifov, G. S.; Zazykina, E. F.; Kalinina, T. A.
 CORPORATE SOURCE: Inst. Vysokomol. Soedin., Leningrad, USSR
 SOURCE: Izvestiya Akademii Nauk SSSR, Seriya Khimicheskaya (1970), (5), 1136-44
 CODEN: IASKA6; ISSN: 0002-3353
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian
 IT 28750-63-2P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 28750-63-2 CAPLUS
 CN Maleamide, N,N'-ethylenebis[2-methyl-N'-phenyl- (8CI) (CA INDEX NAME)]
 Double bond geometry as shown.



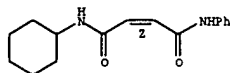
L14 ANSWER 70 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN
 G1 For diagram(s), see printed CA Issue.
 AB HO₂CC[CHCONHCH₂CO₂H] in POC13 reacted with PC15 to give maleoylglycyl chloride and a small amount of ClOCC[CHCONHCH₂COCl]. HO₂C(CH₂)₃CONHCH₂CO₂H showed no similar reaction but reacted with Ac₂O to give glutarylglutamic anhydride (I).

ACCESSION NUMBER: 1967:499606 CAPLUS
 DOCUMENT NUMBER: 67:99606
 TITLE: Synthesis of maleoyl- and glutarylglutamic chlorides
 AUTHOR(S): Paul, Lieselotte; Dittmar, Adelheid; Rusch, Christel
 CORPORATE SOURCE: Humboldt-Univ., Berlin, Fed. Rep. Ger.
 SOURCE: Chemische Berichte (1967), 100(8), 2757-60
 CODEN: CHBEAM; ISSN: 0009-2940
 DOCUMENT TYPE: Journal
 LANGUAGE: German
 OTHER SOURCE(S): CASREACT 67:99606
 IT 18366-17-4P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 18366-17-1 CAPLUS
 CN Maleamide, N-phenyl-N'-[(phenylcarbamoyl)methyl]- (8CI) (CA INDEX NAME)
 Double bond geometry as shown.



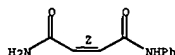
L14 ANSWER 69 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN
 AB Aliphatic primary amines react exothermally with dichloromaleimide or N-phenyldichloromaleimide yielding N-alkyl-2-alkylamino-3-chloromaleimides. The main factors which determine the remarkable ease of exchange of imide N are the nucleophilicity of amide nitrogens and inductive effect of Cl of the chloromaleimides.

ACCESSION NUMBER: 1968:114229 CAPLUS
 DOCUMENT NUMBER: 68:114229
 TITLE: Reaction of dichloromaleimides with amines
 AUTHOR(S): Oda, Ryohei; Hayashi, Yoshiyuki; Takai, T.
 CORPORATE SOURCE: Kyoto Univ., Kyoto, Japan
 SOURCE: Tetrahedron (1968), 24(10), 4051-6
 CODEN: TETRA4; ISSN: 0040-4020
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 IT 18322-00-4P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 18322-00-4 CAPLUS
 CN Maleamide, N-cyclohexyl-N'-phenyl- (8CI) (CA INDEX NAME)
 Double bond geometry as shown.

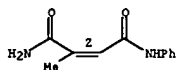


L14 ANSWER 71 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN
 AB Investigation was conducted in 2 directions: incorporation of the imide rings into the macromol. owing to the reactivity of double bonds, and preparation of polyamides involving the aminolysis of the imide rings. Citraconimides polymerize by a radical mechanism, forming linear macromols. consisting of the imide rings. At the initial period, the polymerization rate is proportional to the sq. root of the initiator concentration. The absolute values of the polymerization rates are low. Conversion attains 3% for 75 min. at 70° with 0.102 + 10-3 mole/liter of the initiator. The intrinsic viscosities are 0.07-0.18. Low polymerization rates and low mol. wts. are due to the structure of this cyclic derivative of 1,2,2-substituted ethylene with the Me group at the double bond. An attempt. to polymerize N-methylcitraconimide by uv irradiation resulted in the formation of a mixture of crystalline oligomers; a tetramer was isolated and characterized. Migration of diamines with diimides of unsatd. and saturated acids was also investigated. The reaction depends on pH of the medium. In a neutral medium in the absence of water, diamines are added to the double bonds of maleindiimides, forming polyalkylene-polyimides of aspartic acid. In aqueous alic. at pH 9-9.5, aminolysis of succinimides occurs and mixed polysuccinimides are formed with regular structure and mol. weight up to 20,000.

ACCESSION NUMBER: 1967:444147 CAPLUS
 DOCUMENT NUMBER: 67:44147
 TITLE: Preparation of high molecular weight compounds on the basis of cyclic imides and diimides of dicarboxylic acids
 AUTHOR(S): Sheremeteva, T. V.; Larina, G. N.; Zhenevskaya, M. G.; Gusinskaya, V. A.
 CORPORATE SOURCE: Inst. High Mol. Weight Compounds, Leningrad, USSR
 SOURCE: Journal of Polymer Science, Polymer Symposia (1967), No. 16(Pt. 3), 1631-46
 CODEN: JPYCAQ; ISSN: 0360-8905
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 IT 14668-80-5P 14668-81-6P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 14668-80-5 CAPLUS
 CN 2-Butenediamide, N-phenyl-, (2Z)- (9CI) (CA INDEX NAME)
 Double bond geometry as shown.



RN 14668-81-6 CAPLUS
 CN Maleamide, 2-methyl-N-phenyl- (8CI) (CA INDEX NAME)
 Double bond geometry as shown.



GI For diagram(s), see printed CA Issue.

AB Addition of dry NH₃ (I) or MeNH₂ (II) to the indicated imides either in absolute

EtOH or in H₂O resulted in 30-60% product yields. N-Methylmaleimide and I gave bis(N-methylasparagine)imide (III) m. 174-5°; N-phenylmaleimide and II gave N-phenyl-N'-methylaspartinamide, m. 139-40°; the latter and aqueous NH₃ gave N-phenyl-N'-methylaspartodiamide (IV), m. 182-3°. Monophenyldiamide of maleic acid and dry MeNH₂ gave IV. N-Phenylmaleimide and NH₄OH gave monophenyldiamide of maleic acid, m. 144-4.5°, while similar reaction converted N-phenylcitraconimide into monophenyldiamide of citraconic acid, m. 165-6°. IR spectra are reported. Aminolysis of cyclic imides occurs only in the presence of H₂O when at 0-20°. Dry NH₃ or MeNH₂ in absolute EtOH add to the double bond in the imides of maleic acid and

form imides of aspartic acid. Thus, dry NH₃ and N-methylmaleimide even at 0° gave 38% III.

ACCESSION NUMBER: 1967:85438 CAPLUS

DOCUMENT NUMBER: 66:85438

TITLE: Action of ammonia and amines on cyclic imides of unsaturated acids

AUTHOR(S): Sheremeteleva, T. V.; Romashkova, K. A.

CORPORATE SOURCE: Inst. High Polymers, Leningrad, USSR

SOURCE: Izvestiya Akademii Nauk SSSR, Seriya Khimicheskaya

(1966), (8), 1474-7

CODEN: IASKA6; ISSN: 0002-3353

DOCUMENT TYPE: Journal

LANGUAGE: Russian

IT 14668-80-5P 14668-81-6P

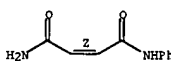
RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of)

RN 14668-80-5 CAPLUS

CN 2-Butenediamide, N-phenyl-, (2Z)- (9CI) (CA INDEX NAME)

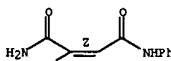
Double bond geometry as shown.



RN 14668-81-6 CAPLUS

CN Maleimide, 2-methyl-N-phenyl- (8CI) (CA INDEX NAME)

Double bond geometry as shown.



AB Unavailable

ACCESSION NUMBER: 1966:490507 CAPLUS

DOCUMENT NUMBER: 65:90507

ORIGINAL REFERENCE NO.: 65:16923e

TITLE: Preparation of alkylene monodiamides and alkylene diisoureaes from ethylenimine and dicarboxylic acids

AUTHOR(S): Ruettel, R.; Vellios, K. Th.; Buckl, H.; Taheri, M.

CORPORATE SOURCE: Univ. Munich, Germany

SOURCE: Fette, Seifen, Anstrichmittel (1966), 68(6), 453-6

CODEN: FSASAX; ISSN: 0015-038X

DOCUMENT TYPE: Journal

LANGUAGE: German

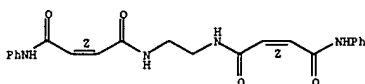
IT 7126-25-2, Maleamide, N,N''-ethylenebis[N'-phenyl-

(preparation of)

RN 7126-25-2 CAPLUS

CN Maleamide, N,N''-ethylenebis[N'-phenyl- (7CI, 8CI) (CA INDEX NAME)

Double bond geometry as shown.



GI For diagram(s), see printed CA Issue.

AB The title rearrangement proceeds in 2N aqueous NaOH(dioxane cosolvent) and in

tert-BuOK-tert-BuOH, to generate a chloroepiulfone (I) which may either undergo a thermal loss of SO₂ to a vinyl chloride, or a base-induced loss of HCl leading to the thiiren dioxide (II), which may have a sufficient lifetime for base attack to produce a sulfonic acid HRC:C(R')SO₃H, the direction of cleavage being such as to generate the more stable carbanion. The results suggest for II the order of relative stabilities: di-Me > di-Ph > Ph > PhCH₂ = phenethyl, similar to that of the cyclopropanone system.

ACCESSION NUMBER: 1966:490506 CAPLUS

DOCUMENT NUMBER: 65:90506

ORIGINAL REFERENCE NO.: 65:16923c-e

TITLE: The in situ generation of thiiren dioxides by the base-induced rearrangement of α-dihalosulfones

AUTHOR(S): Paquette, Leo A.; Wittenbrook, Lawrence S.

CORPORATE SOURCE: Ohio State Univ., Columbus

SOURCE: Chemical Communications (London) (1966), (14), 471-3

CODEN: CCOMAS; ISSN: 0009-241X

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 65:90506

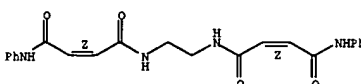
IT 7126-25-2, Maleamide, N,N''-ethylenebis[N'-phenyl-

(preparation of)

RN 7126-25-2 CAPLUS

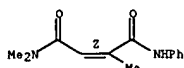
CN Maleamide, N,N''-ethylenebis[N'-phenyl- (7CI, 8CI) (CA INDEX NAME)

Double bond geometry as shown.



L14 ANSWER 78 OF 83 CAPLUS COPYRIGHT 2005 ACS ON STN
 AB Treatment of succinimides or citraconimides in MeOH at 3-5° with the appropriate amine in MeOH, followed by 3-4 hrs. at 0° and 12-16 hrs. at room temperature gave the following diamides; RNHCO(CH₂)₂CONR'R''
 (R, R', R'', and m.p. shown, resp.): H, H, Me, 158°; H, H, C₆H₁₁ (C₅H₁₁ = cyclohexyl), 190°; Me, H, Me, 176.5°; Ph, Me, Me, 154°; Ph, H, Me, 202°; C₆H₁₁, H, C₆H₁₁, 238°.
 RNHCOCH=CHCONR'R''; Me, H, Me, 138° (decomposition); Ph, Me, Me, 180-1° (decomposition); C₆H₁₁, Me, H, 165-6° (decomposition). The latter reactions run in MePh gave not the above diamides but an unidentified series of other products.
 ACCESSION NUMBER: 1964:16226 CAPLUS
 DOCUMENT NUMBER: 60:16226
 ORIGINAL REFERENCE NO.: 60:2806h, 2807a-b
 TITLE: Synthesis of N-substituted diamides of succinic and citraconic acids
 AUTHOR(S): Sheremeteva, T. V.; Gusinskaya, V. A.; Kudryavtsev, V. V.
 CORPORATE SOURCE: High Polymer Inst., Leningrad
 SOURCE: Izvestiya Akademii Nauk SSSR, Seriya Khimicheskaya (1963), (10), 1821-3
 CODEN: IASKA6; ISSN: 0002-3353
 DOCUMENT TYPE: Journal
 LANGUAGE: Unavailable
 IT 97159-65-4, Maleamide, N₄,N₄,2-trimethyl-N₁-phenyl- (preparation of)
 RN 97159-65-4 CAPLUS
 CN Maleamide, N₄,N₄,2-trimethyl-N₁-phenyl- (7CI) (CA INDEX NAME)

Double bond geometry as shown.

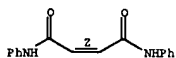


L14 ANSWER 80 OF 83 CAPLUS COPYRIGHT 2005 ACS ON STN
 AB N-Phenyl isomaleimide (7.5 g.) in 100 ml. Et₂O was treated with 4.6 g. PhNH₂, the mixture kept 2.5 days, the precipitate filtered off, recrystd. from MeOH, and purified by passing through a Florisil column in C₆H₆ to give 9 g. N,N'-diphenylmaleimide, m. 184-6°. Similarly was prepared N,N'-dibutylmaleimide, sublimed at 190°, which was reduced with H over PtO₂ to N,N'-dibutylsuccinimide, m. 185°.
 ACCESSION NUMBER: 1962:45599 CAPLUS
 DOCUMENT NUMBER: 57:5599
 ORIGINAL REFERENCE NO.: 57:11100b-c
 TITLE: N,N'-Disubstituted maleamides
 INVENTOR(S): Sauers, Carol K.; Cotter, Robert J.
 PATENT ASSIGNEE(S): Union Carbide Corp.
 SOURCE: 4 pp.
 DOCUMENT TYPE: Patent
 LANGUAGE: Unavailable
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3023240		19620227	US	19600524

 IT 59411-44-8, Maleanilide (preparation of)
 RN 59411-44-8 CAPLUS
 CN 2-Butenediamide, N,N'-diphenyl-, (2Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

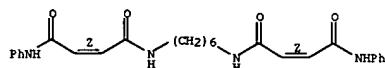


L14 ANSWER 79 OF 83 CAPLUS COPYRIGHT 2005 ACS ON STN
 AB 1,6-Bis[3-(N-phenylamido)propenoylamido] hexane PhNHCOCH=CHCONH(CH₂)₆NHCOCH=CHCONHPh (I) was prepared in two ways: (a) A solution of 1.16 g. hexamethylenediamine in 25 cc. Et₂O was added to a solution of 3.46 g. N-phenylisomaleamide in 50 cc. Et₂O; an immediate precipitate formed. The mixture was stirred 24 hrs. at room temperature and filtered. The resulting solid was dried at 100° 24 hrs. to give 4.6 g. I. (b) To a solution of 2.76 g. N,N'-hexamethylenebisomaleamide in 50 cc. Et₂O was added a solution of 1.86 g. PhNH₂ in 25 cc. Et₂O to give an immediate precipitate; further treatment as above yielded 3.5 g. I. A thermoplastic polymer could be produced by refluxing equimolar quantities of I and 4,6-dimethyl-5-carbomethoxy-pyrone 72 hrs. in PhBr. For polymerization of I with other pyrones cf. U.S. 2,890,207 (CA 53, 17572h). The use of I as co-monomer in vinyl polymerization (U.S. 2,790,784, CA 51, 11667e; U.S. 2,794,793, CA 51, 12500h) and in agriculture as a weed control agent, was claimed.
 ACCESSION NUMBER: 1963:26868 CAPLUS
 DOCUMENT NUMBER: 58:26868
 ORIGINAL REFERENCE NO.: 58:4432e-g
 TITLE: Bis-maleamides
 INVENTOR(S): Sauers, Carol K.; Cotter, Robert J.
 PATENT ASSIGNEE(S): Union Carbide Corp.
 SOURCE: 5 pp.
 DOCUMENT TYPE: Patent
 LANGUAGE: Unavailable
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3041376		19620626	US	19600524

IT 7126-26-3, Maleamide, N,N''-hexamethylenbis[N'-phenyl- (preparation of)
 RN 7126-26-3 CAPLUS
 CN 2-Butenediamide, N,N''-1,6-hexanedilylbis[N'-phenyl- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

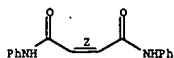


L14 ANSWER 81 OF 83 CAPLUS COPYRIGHT 2005 ACS ON STN
 AB Amidomethylated aromatic compds., Ar(CH₂NHCO)R, are prepared. For example, 15.9 g. m-xylene, 35.0 g. N-methylolacrylamide (I), and 100 ml. 85% H₃PO₄ heated at 65-70° until the endothermic reaction subsides then at 85-90° 4 hrs, cooled, poured into stirred cold H₂O, filtered, washed, and dried yields 76% crude 4,6-bis(acrylamidomethyl)-m-xylene. Replacing I by N-methylolacetamide yields 4,6-bis(acetamidomethyl)-m-xylene (II), m. 252-6°. From 22.5 ml. H₂SO₄, 105 ml. HOAc, and 71.5 g. N,N'-methyloladiacetamide, m. 197-8° prepared from acetamide and formaldehyde in xylene at about 130°, heated 5.5 hrs. at 90° gives N-(2,4-dimethylbenzyl)acetamide, m. 113-12.5° (C₆H₅). Diacetamidomethyl ether (III), m. 97-98.5° (dioxane), is prepared from 418 g. acetamide (IV), 360 g. paraformaldehyde (V), and 1000 ml. xylene refluxed with vigorous stirring in a flask with a trap for H₂O formed, until 121 ml. H₂O is collected. Heating 65 g. III with 17 ml. H₂SO₄ and 78 ml. HOAc 5.5 hrs., cooling, and diluting with dilute NH₄OH gives II. From 118 g. IV, 66 g. V, and 3 ml. 40% aqueous KOH heated 15 min. at 60° poured into 500 ml. HOAc plus 500 ml. Ac₂O, heated 15 hrs. at 100° and distilled in vacuo is formed, after removal of excess reagents, N-(acetoxymethyl)acetamide (VI), b.p. 117-25°, n. 1.4451. VI reacted with m-xylene, H₂SO₄, and HOAc 4 hrs. at 85-90° to give II. N-(Chloromethyl)acetamide, m-xylene, and anhydrous ZnCl₂ refluxed about 3 hrs. and poured into dilute NH₄OH gives N-(2,4-dimethylbenzyl)acetamide. A mixture of 496 g. II, 250 ml. H₂SO₄, and 2 l. H₂O is refluxed with agitation 33.5 hrs., cooled, extracted with C₆H₆, the precipitate filtered off, and the aqueous layer neutralized with NaOH solution. Continuous extraction with C₆H₆ 5 hrs., with BuOH 4 hrs., removal of solvents, and purification gives 4,6-bis(aminomethyl)-m-xylene (VII), m. 139-40°. VII·2HCl, m. 305-10° in Tetralin treated with phosgene at 200-05° 5-7 hrs. gives after distillation, mainly 4,6-bis(isocyanato methyl)-m-xylene. The latter reacts with polyesters to form polyurethan resins.
 ACCESSION NUMBER: 1962:455998 CAPLUS
 DOCUMENT NUMBER: 57:55998
 ORIGINAL REFERENCE NO.: 57:11099g-1,11100a-b
 TITLE: Amidomethylation of aromatic compounds
 INVENTOR(S): Parris, Chester L.
 PATENT ASSIGNEE(S): Pittsburgh Plate Glass Co.
 SOURCE: 5 pp.
 DOCUMENT TYPE: Patent
 LANGUAGE: Unavailable
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3024282		19620306	US	19571029
GB 891771			GB	

 IT 59411-44-8, Maleanilide (preparation of)
 RN 59411-44-8 CAPLUS
 CN 2-Butenediamide, N,N'-diphenyl-, (2Z)- (9CI) (CA INDEX NAME)

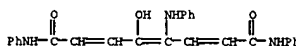
Double bond geometry as shown.



L14 ANSWER 82 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 filtered, acidified, filtered again, and extd. 3 days with Et₂O gave 5.4 g. fumaric acid, m. 274° (sealed capillary). trans-I (30 g.) added to 24 g. NaOH in 300 cc. H₂O, filtered, and poured into 60 cc. concd. HCl in 300 cc. H₂O gave 31.1 g. O.CO.CH:CH.C(OH)CH:CHCO₂H (XV). I (56.8 g.) in 450 cc. 10% aq. NaOH acidified with 1.10% AcOH and concd. gave 4.7 g. yellow-orange mono-Na salt (XVI) of [HO₂CCH:CHC(OH)]₂ (XVII), 3.5%, sol. in H₂O to give a soln. of pH 5.3. XVI heated at 110-20° lost H₂O to form the bright red Na salt of XV, m. 250-5° (decompn.), which with H₂O gave immediately XV. Aq. XVI gave with the appropriate salts the sparingly sol. Ni, Co, Al, Mn, Fe, Cu, and Ba salts of XVII. XVI or XV treated with the calcd. amt. of NaOH, filtered, evapd., and triturated with EtOH gave the yellow di-Na salt of XVII.2H₂O, which heated in vacuo at 120° several hrs. became orange. XVII gave also an orange tri-Na salt. XVI (10.0 g.) in 250 cc. H₂O hydrogenated at room temp. over 0.08 g. PtO₂, acidified with HCl, and exsd. with CHCl₃ and then with EtCO₂Me gave a small amt. of material from the CHCl₃ and 1.0 g. HO₂C(CH₂)₂CO(CH₂)₂CO₂H from the EtCO₂Me ext. Crude diphenylbifurandione (XVIII) (4.3 g.), 1.2 g. NaOH, and 25 cc. H₂O heated 2 hrs. on the steam bath, cooled, and treated with AcOH gave 1.8 g. yellow-orange diphenyl-4,5-dihydroxy-2,4,6-octatrienedioic acid mono-γ-lactone, m. 132-4° (EtOAc). I (15.3 g.) added with stirring and cooling to 5.2 g. NaOMe in 200 cc. MeOH during 2 min., treated with 6 cc. glacial AcOH, and cooled gave 16.8 g. Me ester (XIX) of XV, m. 184° (decompn.). trans-I (50 g.) added with stirring to 34 g. NaOMe in 300 cc. MeOH gave 45.6 g. mixed mono- and disodio derivs. of the di-Me ester (XX) of XV, m. 160° (decompn.). The Na salt of XIX in MeOH treated with AcOH gave 95% XIX. The Na salt triturated with 85% H₃PO₄ gave 67% XIX. cis-I (5.15 g.) added with stirring to 1.9 g. NaOMe in 100 cc. MeOH and treated with 3 cc. AcOH gave 5.55 g. XIX, m. 177-82° (MeOH). I (50 g.) added to 4.5 g. Li in 300 cc. MeOH, stirred 2 hrs., and filtered gave 54.99 mixed mono- and di-Li salt of XX, decomp. 217-23°, and 2.8 g. unchanged I. XVIII (5.2 g.) and 100 cc. MeOH treated with stirring with 1.8 g. NaOMe gave 4.3 g. monolactone ester salt, red ppt., a 4.2-g. portion of the salt in 30 cc. MeOH treated with 2 cc. AcOH gave 2.9 g. cis-XVIII, m. 208°. I (24.4 g.) in 400 cc. concd. NH₄OH warmed slightly and the soln. filtered into 350 cc. AcOH in 150 cc. H₂O gave 19.1 g. monoamide (XXI) of XV, m. about 250° (decompn.). I in NH₄OH evapd. in vacuo yielded the NH₄ salt of XV. XXI (5.43 g.) in 30 cc. NNH₄OH evapd. to dryness in vacuo gave 6.46 g. NaO₂CCH:CHC(OH):C(OH)CH:CHCONH₂, brick-red solid. I treated in the usual manner with the appropriate amine and then acidified gave the corresponding O.CO.CH:CH.C(OH)CH:CHCONHR (R, reaction medium, reaction temp., % yield, and m.p. given): Bu (XXII), dioxane (MeOH or none), room temp., 75, 166°; iso-Bu, dioxane, room temp., 57, 175° (decompn.); Cl₃HI₇, dioxane, 100°, 20, 135-40°; p-MeC₆H₄, dioxane, 100°, 49, 244-52° (decompn.); p-HO₂CC₆H₄, AcOH, 110°, 94, 258-63°. Similarly were prepd. O.CO.CH:CH.C(OH)CH:CHCONHMe₂, m. 200-20° (decompn.), in 28% yield at room temp. in dioxane, and O.CO.CH:CH.C(OH)CH:CHCONHPh (R' = mixed isomeric dodecyl), m. 199-201°, in 1% yield at 100° in dioxane. XXII in AcOH contg. 2 drops concd. H₂SO₄ gave cis-I. I (9.8 g.), 23 g. p-ClC₆H₄NH₂, and 500 cc. dioxane refluxed 24 hrs. and cooled yielded 10.2 g. O.CO.CH:CH.C(OH)CH:CHCONH₂Cl-p (CH:CHCONH₂CH₂Cl-p, m. 210-15° (decompn.) (EtOAc). I (14.8 g.), 36 g. PhNH₂, 20 g. Ac₂O, and 250 cc. AcOH refluxed 2 hrs. yielded 16.8 g. ArNHCOCH:CHC(OH)C(NHAr)CH:CHCONHAr (XX-111) (Ar = Ph, m. 257° (decompn.)). I (13.0 g.) and 24 g. 1-ClOH₇Me₂ in 300 cc. AcOH refluxed 6 hrs. and cooled, the ppt. (2 g.) extd. with hot AcOH and EtCO₂Me to remove unreacted I, the residue dissolved in HCONH₂, and the soln. dilid. with H₂O yielded XXIII (Ar = 1-ClOH₇), m. 298-302°. I (8.2 g.) in 800

L14 ANSWER 82 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN
 GI For diagram(s), see printed CA issue.
 AB Δ2,2' (5H,5'H)-Bifuran-5,5'-dione (I) added to either 1 or 2 moles diene in the Diels-Alder reaction. trans-I in dioxane heated with 1 mole equivalent (MeCH:CH₂)₂ (II) at 150° 16-19 hrs. in a closed steel vessel yielded 84% III (R = Me) (IV), m. 153-4°. cis-I gave similarly 24% V (R = Me) (VII), m. 174-8°, and 53% IV, m. 156°. IV treated further under the same conditions yielded 23% VII (R = Me) (VIII), m. 244°. I heated 2 hrs. at 175° with 2 mole equivs. II gave 23% VIII, m. 240-3°, and 67% IV, m. 154-6°. VI and II (equimolar ams.) heated 1 hr. at 150° yielded 11% isomerized adduct, m. 208-9°, and 39% unchanged VI, m. 173-6°. I heated 6 hr. at 150° with 6 mole equivs. (CH:CH₂)₂ (IX) yielded 75% III (R = H), m. 109.5°. A similar run at 200° gave VII (R = H). I and o-phellandrene (equimolar ams.) heated 1 hr. at 175° in dioxane gave a monoadduct, m. 168-75°. 2,2'-Dihydroxy-2,2'-bifuran-5,5' (2H,2'H)-dione (X) and 2 mole equivs. II in dioxane heated at 150° gave 33% 2,2'-dicarboxy-4,4',5,5'-tetramethyl-1,1',2,2',3,3',6,6'-octahydrobenzil (XI), m. 176°. trans-I (32.8 g.) in 150 cc. H₂SO₄ treated with stirring and cooling with 15 cc. concentrated HNO₃ in 35 cc. concentrated H₂SO₄ during 1 hr., stirred 3 hrs. without cooling, and poured onto about 3 l. ice gave 25.1 g. X, m. 187-9° (decomposition) (EtOAc or EtCO₂Me), trans-I (5 g.) in 1 l. AcOH treated with stirring at 70° with 7.9 g. Me₃COCl during 3 hrs., kept 3 hrs. at 70° and then at room temperature overnight, concentrated to less than 100 cc., filtered from 1.15 g. I, and the filtrate evaporated gave 3.4 g. X, m. 189° (decomposition) (MeCO₂Et). X (25 g.), 350 cc. dioxane, and 0.13 g. PtO₂ hydrogenated about 7 hrs. at room temperature and 3 atmospheric yielded 21.1 g. [HO₂C(CH₂)₂CO]₂ (XII), bright yellow, m. 182-3° (EtOH). The hydrogenation of X to XII can also be carried out over 10% Pd-C in dioxane or over Pt in AcOH. XI and o-C₆H₄(NH₂)₂ (XIII) (equimolar ams. in EtOH) gave 2,3-bis(6-carboxy-3,4-dimethyl-3-cyclohexenyl)benzopyrazine, m. 212-14° (decomposition) (aqueous EtOH). X (9.9 g.), 5.6 g. XIII, and 50 cc. EtOH heated 1 hr. on the steam bath gave 12.9 g. benzopyrazine-2,3-diacrylic acid, darkened at 240°. X (2 g.) and 25 cc. Ac₂O heated 6 hrs. on the steam bath, diluted with 50 cc. EtOH and concentrated, the operation repeated twice, and the crude product recrystd. from EtOAc yielded 0.8 g. 2,2'-diacetoxy-2,2'-bifuran-5,5'-dione, m. 185° (EtOAc), X (10 g.), 20 g. PhCCl₃, and 1 drop H₂SO₄ heated gently until a vigorous exothermic reaction took place, the mixture evaporated in vacuo, and the residual tar dissolved in hot MeOH and cooled gave 1.9 g. of one stereoisomer of 2,2'-dimethoxy-2,2'-bifuran-5,5'-dione (XIV), m. 213° (EtOAc). X (20 g.) and a trace p-MeC₆H₄SO₃H in 600 cc. MeOH refluxed 7 hrs. gave 5.2 g. XIV, m. 213°; the liquid portion of the esterification product treated with a little solid NaHCO₃ and MgSO₄, filtered, and evaporated gave 15.2 g. of the other stereoisomer of XIV, m. 149.5° (EtOAc or MeOH). X (5.7 g.) and 30 cc. SOCl₂ refluxed 8 hrs., the undissolved X (3.4 g.) filtered off, the filtrate evaporated, the residue dissolved in EtOAc, and diluted with petr. ether gave 1.0 g. 2,2'-dichloro-2,2'-bifuran-5,5'-dione, m. 213-14° (EtOAc); the filtrate from the crystallization diluted with petr. ether precipitated the cyclic sulfite, m. 134-5° (EtOAc-petr. ether). I (8.2 g.), 25 g. com. bleaching powder, and 200 cc. H₂O warmed overnight on the steam bath,

L14 ANSWER 82 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 cc. Me₂CO warmed on the steam bath, treated with 1 g. CuCl₂.2H₂O and then slowly with stirring with 12 g. [p-O₂NC₆H₄N₂]BF₄ in 120 cc. H₂O at about room temp., heated 2 hrs. on the steam bath, and filtered gave 5.8 g. reddish brown p-O₂NC₆H₄ deriv. of I, m. 230-40° (decompn.) (Me₂CO). I (23.4 g.) in 1800 cc. AcOH treated 12 hrs. at 100° with Cl and evapd. in vacuo gave 1.0 g. di-Cl deriv., needles, m. 169.5° (EtOH).
 ACCESSION NUMBER: 1959:121992 CAPLUS
 DOCUMENT NUMBER: 53:121992
 ORIGINAL REFERENCE NO.: 53:21865b-1,21867a-1,21868a-c
 TITLE: Bifurandione. III. Addition and ring-opening reactions
 AUTHOR(S): Holmquist, H. E.; Sauer, J. C.; Engelhardt, V. A.; Howk, B. W.
 CORPORATE SOURCE: E. I. du Pont de Nemours & Co., Wilmington, DE
 SOURCE: Journal of the American Chemical Society (1959), 81, 3686-92
 CODEN: JACSAT; ISSN: 0002-7863
 DOCUMENT TYPE: Journal
 LANGUAGE: Unavailable
 OTHER SOURCE(S): CASREACT 53:121992
 IT 123935-79-5, 2,4,6-Octatrienedianilide, 4-anilino-5-hydroxy- (preparation of)
 RN 123935-79-5 CAPLUS
 CN 2,4,6-Octatrienedianilide, 4-anilino-5-hydroxy- (6CI) (CA INDEX NAME)



AB Two moles of PhNH₂ in 300 mL PhMe at room temperature or (for slightly soluble

amines) at 50-70°, treated dropwise with 55 g. PCl₃ in 50 mL PhMe and refluxed and agitated for 1-2 h., give 67.5% of phenylphosphazoneanilide (PhN:PNHPh), m. 251-3°; the 4,4'-di-Me derivative m. 197-200° (preheated bath), 42%; the 2,2'-di-MeO derivative m. 138-40°, 32%. If the RN:PNHR is treated with a carboxylic acid, R'CO₂H, in PhMe and the mixture is refluxed for 2 h., HPO₂ and N-substituted amides, R'CONHR (I) are formed. The following yields of I (R' = Ph) (%) were obtained from the amines listed and BzOH: PhNH₂ 85, o-, m-, and p-MeC₆H₄NH₂ 72, 80, and 56, m-ClC₆H₄NH₂ 75, o-MeOC₆H₄NH₂ 76, m-O₂NC₆H₄NH₂ 70, m-H₂NC₆H₄OH 7 (?), p-H₂NC₆H₄NHPh 30, m- and p-C₆H₄(NH₂)₂ 11 and 67, (p-H₂NC₆H₄)₂ 94, (p-H₂NC₆H₄)₂CH₂220, 1-ClOHPNH₂ 39, p-H₂NC₆H₄SO₃H 90, 2-aminopyridine 52 (CSH₅N as solvent), cyclohexylamine 68, BuNH₂ 45, dodecylamine 60-77; o- and p-O₂NC₆H₄NH₂ give only tars. p-H₂NC₆H₄NHAc and 1-aminoanthraquinone do not form reactive phosphazo compds., nor do amino carboxylic acids. That the reaction is not peculiar to BzOH was shown by the successful

preparation of the following anilides of various acids: HCO₂H, small, AcOH 74, EtCO₂H 65, lauric 74, stearic 65, PhCH₂CHCO₂H 80, HOCH₂CO₂H 49, (CO₂H)₂ 45, CH₂(CO₂H)₂ 65, (CH₂CO₂H)₂ 41, pimelic 53, fumaric 34, maleic 16, tartaric 45, BzOH 85, p-O₂NC₆H₄CO₂H 83, p-HOC₆H₄CO₂H 74, o-H₂NC₆H₄CO₂H 42, o-, m-, and p-C₆H₄(CO₂H)₂ 73, 55, and 25, 3,2-HOC₁₀H₆CO₂H 89-100, nicotinic 38. Glycine and alanine did not react. p-H₂NC₆H₄CO₂H gave a solid m. above 300°, the o-isomer gave 42% of o-H₂NC₆H₄CONHPh. Na salts of carboxylic acids do not react and the method is not applicable to N-substituted sulfonamides. When an excess of PhNH₂ was used in the initial reaction with PCl₃, the ultimate yields of BzNHPh were increased to 100%; by also using an excess of BzOH the yield is 115% (based on PCl₃). It is also possible to prepare RN:PNHR' from PhN:PCl, though the method is less efficient and more tedious. PhN:PNHPh is readily recrystd. from CHCl₃ but the resultant crystals are not identical with the original as shown by x-ray diffraction patterns. Prolonged exposure to light or heat (100° or above) causes slow decomposition though the compds. are stable for months at room temperature or in the dark. X-ray patterns are

given

also for PhNH₂.H₃PO₃ and (PhNH₂)₂POH.

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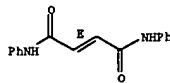
IT 6833-07-4, Fumaranilide 59411-44-8, Maleanilide

(preparation of)

RN 6833-07-4 CAPLUS

CN 2-Butenediamide, N,N'-diphenyl-, (E)- (9CI) (CA INDEX NAME)

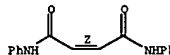
Double bond geometry as shown.



RN 59411-44-8 CAPLUS

CN 2-Butenediamide, N,N'-diphenyl-, (2Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



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COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

412.52

1016.56

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

ENTRY

SESSION

CA SUBSCRIBER PRICE

-59.86

-76.65

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